





*Francis Whickham Esq.
With the Author's
Kind regards*

28,997/B

AN EXPERIMENTAL ENQUIRY
INTO THE
VALUE OF MEDICINAL NAPHTHA
IN
TUBERCULAR PHTHISIS.

A PRACTICAL ENQUIRY
INTO THE
VALUE OF MEDICINAL NAPHTHA
IN
TUBERCULAR PHTHISIS.

BY
EDWARD OCTAVIUS HOCKEN, M.D.

PHYSICIAN TO THE BLENHEIM STREET INFIRMARY AND FREE DISPENSARY;
FELLOW OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY;
MEMBER OF THE PROVINCIAL MEDICAL AND
SURGICAL ASSOCIATION; AUTHOR OF A
TREATISE ON AMAUROSIS AND
AMAUROTIC AFFECTIONS;
&c. &c.

"VERITATIS MAGNA EST POTESTAS, ET PREVALEBIT."

LONDON:
SAMUEL HIGHLEY, 32, FLEET STREET.
1844.



LONDON: W. OSTELL,
PRINTER,
HART STREET, BLOOMSBURY.

P R E F A C E.

THE Author has put forth the following Essay with a sincere desire to benefit *others*, and entirely without the prospect or probability of benefitting *self*. No class of patients are more deserving of commiseration and of the earnest attempts of the practitioner to alleviate their ailments, and promote, if possible, the cure of their complaints, than the consumptive—falling victims, as many of them do, in the very pride of youth and beauty. Some of the profession have set their faces so decidedly against the very supposition of curing phthisis in any stage or form, that those who differ from them in any manner—however candidly and honestly they may explain the facts which have caused them to differ on a point so essential—are almost sure to draw down on themselves the wrath and indignation, if not the contempt, of many whose good opinion they especially covet and desire. In the following pages the reader will be presented with a certain number of *facts*, from which he may draw his own conclusions, although the author has not neglected to supply those at which he has himself arrived. On these facts his present belief of the value of medicinal naphtha are founded.

In apology for writing on a subject which requires both a natural *delicacy and accuracy in hearing* and appreciating sounds, as well as a *taught and thoroughly practised ear* to interpret those sounds, (inasmuch as the whole is based on correct diagnosis, which is chiefly formed by the sense of hearing), the author may state, that during the last ten years he has possessed very ample opportunities of gaining proficiency as an auscultator, and that

he has endeavoured to avail himself of those opportunities to the best of his ability. During this time he has studied under some of the best auscultators in the world, and has accustomed himself to examine into the physical signs of chest disease as constantly and as commonly as into the peculiarities and characters of the pulse. He believes his sense of hearing to be naturally excellent, as he has found himself capable of distinguishing and appreciating sounds which were not detected by some others engaged in the same pursuits with himself, but which the progress of the case proved to be perfectly correct, or the post mortem examination has amply confirmed.

His present opportunities of observation at the Blenheim-street Institution are considerable. During the last eleven months nearly 6,000 patients have been treated by the Physicians alone, exclusive of cases in which their opinions have been needed, under the care of the Surgeons or the Surgeon-accoucheur.

The Author may also quote from another part of his Essay what every conscientious practitioner will be willing to allow is but just, in the practice of an experimental science like medicine, and which in a great measure led him to give naphtha a trial at all, viz., “ The judicious practitioner will not scruple to receive a valuable hint merely because it was proposed by Mr. A. or Dr. B. ; he will examine carefully into ever practical suggestion—no matter the source from whence it springs—and will endeavour from his own experience to separate the good from the bad, the valuable from the refuse, the practical from the theoretical.”

13, BLOOMSBURY SQUARE,

October, 1844.

CONTENTS.

	PAGE.
Preface	v
Chap. 1.—Preliminary considerations	1
Naphtha deserving and requiring a fair and unprejudiced trial	1
Is Phthisis curable?	2
Propositions of the Author to be answered by an appeal to facts	4
Chap. 2.—Physical and Chemical characters of Medicinal Naphtha, and its effects on Tubercle	5
Chap. 3.—Value of Medicinal Naphtha in the early stages of Phthisis Pulmonalis	11
Case 1. Tubercular deposition in the ant. sup. part of the right lung. Complete recovery from Naphtha	12
Case 2. Ditto. Cure from Naphtha	13
Case 3. Ditto; slight anasarca. Cure from Naphtha	14
Case 4. Ditto. Cure from Naphtha	15
Case 5. Ditto; Abscesses by the side of the Vagina. Great improvement from Naphtha	16
Case 6. Tubercular Consolidation of the superior lobes of both lungs. Cure from Naphtha	17
Case 7. Ditto. Cure from Naphtha	18
Remarks	21
Chap. 4.—Value of Medicinal Naphtha in more advanced forms of Phthisis previous to softening of the Tubercles	27
Case 8. Tubercular Consolidation of the superior parts of the right lung. Cure from Naphtha	28
Case 9. Tubercular Consolidation of the superior parts of both lungs. Great relief from Naphtha. Relapse, with laryngeal symptoms.	30
Case 10. Ditto of right lung. Great benefit from Naphtha	33
Case 11. Ditto. Great benefit from Naphtha	34

	PAGE.
Chap. 4.—Case 12. Ditto. Improvement from a week's use of Naphtha	26
Case 13. Ditto of both lungs. Great relief from Naphtha	37
Remarks	38
Chap. 5.—Value of Medicinal Naphtha in advanced Phthisis	42
Case 14. Tubercular Consolidation of the upper portions of both lungs; empty cavern of small size in the right; small gurgling cavity of the left. Marked improvement in the general symptoms and physical signs from Naphtha	42
Case 15. Ditto of both lungs; caverns in both. Great relief of the symptoms from Naphtha.—Death	45
Case 16. Ditto of the right lung; close firm adhesions of the entire right pleura; empty cavern. Death from disease of the Brain	4
Case 17. Ditto of both lungs; gurgling cavern in the left. Great relief of the symptoms.—Death	50
Case 18. Ditto of the right lung; gurgling cavern. Relief	52
Case 19. Ditto. Ditto	53
Case 20. Ditto of both lungs; caverns on both sides. Great relief	53
Case 21. Ditto of the left lung; cavern. Great relief of the symptoms.—Death	54
Case 22. Ditto of the right lung; cavern. Relief of symptoms.—Death.	55
Case 23. Ditto of the right lung; cavern; laryngeal disease. Relief from Naphtha.—Death	57
Remarks	58
Chap. 6.—Statistical Remarks on the preceding facts	61
Statistical Tables	62
Analysis of these Tables	66
Chap. 7.—Practical Conclusions of the Author	67
Appendix	71
Post Mortem Examination of the chest of Eliz. Cooper	71
Case of Louisa Willett	72

AN EXPERIMENTAL ENQUIRY
INTO THE
VALUE OF MEDICINAL NAPHTHA
IN
TUBERCULAR PHTHISIS.

CHAPTER I.

PRELIMINARY CONSIDERATIONS.

BEING fully convinced that "No medical proposition should be condemned solely on the grounds of its appearing visionary and improbable when first enunciated" and without giving it a fair and unprejudiced trial, I determined to submit a certain number of cases of tubercular phthisis to the influence of the naphtha recommended by Dr. Hastings, and note with the most rigid impartiality every fact as far as it related to the effects of the remedy (if any) on the general symptoms, but especially on the physical signs. I was stimulated to the investigation of the value of naphtha, also, by the fact that every case of the disease, sufficiently advanced to admit of a positive diagnosis being formed, which I had previously witnessed, had invariably progressed from bad to worse, and from this to death; no matter what plan of treatment had been employed. Believing, with the Reviewer in the *Provincial Medical Journal*, of Dr. Hastings's work, that "the high importance of the question involved demands at least an unprejudiced trial and an impartial judgment, and moreover they are due to the author who has frankly and openly stated his views, without any attempt at concealment or mystification," I determined to lay before the profession rather the *facts themselves* which I had gleaned by my enquiries, and

allow them to judge for themselves, than any generalizations or conclusions of my own formed by the consideration of the same facts.

Notwithstanding that I was determined to investigate the subject in the animus I have mentioned, still I must candidly confess that I commenced the use of naphtha with a complete disbelief of its possessing any specific power over the general symptoms, much less over the pathological essence of the disease—believing this to be in its nature incurable. The results of my present experience, however, compel me to say that many chronic forms, especially when the disease is not extensively disseminated, and most cases in their early stages yield favourably to naphtha when exhibited in suitable doses, either given diluted with water alone, or combined with such other treatment as the features of the individual case may indicate. Hence it will be seen that I have come to the conclusion that the proper or medicinal naphtha is by far the most valuable remedy hitherto proposed for the *relief* and in some instances *cure* of this distressing malady.

As regards the curability of some stages and forms of genuine tubercular phthisis I do not now entertain the shadow of a doubt. Cicatrized tubercular cavities have been observed and recorded by competent authorities, proving that the disease is in its nature curable, although the powers of the patient never effect a cure, except in those rare instances where very limited tubercular depositions, are not followed by a subsequent augmentation of the disease. Many cases in their earliest stages have doubtless been cured by change of climate, and by judicious treatment, which would have gone on to the patients destruction, under less favourable circumstances; although, perhaps, these have been considered merely as threatened cases of phthisis, from a want of minuteness and accuracy in diagnosis.

Dr. Marshall Hall states that he has known the constant application of a lotion consisting of one part pure alcohol and three parts water to the upper regions of the thorax, just below the clavicles, effect a cure of tubercular depositions. The lotion is to be applied through the medium of a piece of soft linen, folded six times—the linen being moistened every five minutes,

and free evaporation being allowed. If Dr. Hall's assertions meet with assent and belief, his testimony would prove that such cases are not always incurable.

The testimony of Drs. Stokes and Graves would also tend to prove that there are cases of genuine phthisis which are not incurable. "Several remarkable cases of phthisis," says Dr. Graves, "have occurred in my own practice, and in the practice of Dr. Stokes, in which the patients recovered either temporarily or permanently, in a manner quite unforeseen and unexpected. In some recovery took place after the occurrence of abundant tubercular deposition and crepitus, and in others after the formation of tubercular cavities. Facts such as these ought to prevent the practitioner from placing too great reliance upon stethoscopic examinations as a positive means of *prognosis*; for it may be looked upon as established that phthisis, like most other diseases, *does not always necessarily progress to a fatal termination*.*

* The following case has been recently published in an American journal.—

SPONTANEOUS CURE OF PHTHISIS BY C. T. COLLINS, M.D.

"It is my belief that there are many more cases of phthisis pulmonalis cured by nature alone than medical men are generally aware of. I do not mean to say that we should always trust to nature alone, by any means, but that we should be very cautious lest we do too much." The case came under Dr. Collins' care the 29th of March last.

"Sarah Hamor, ætat 55, born in England, had always been rather delicate. She was attacked last fall with erysipelas of the left hand and arm, and after recovering from that she caught a severe cold which was followed by a troublesome cough, and shooting pains through the chest, but more especially on the right side—from the right mamma to the shoulder blade of the same side. She now began to lose flesh, and when I first saw her (which was as above stated) she was so much emaciated—to use a common phrase—that she was a mere skeleton. She was so weak that she was unable to help herself; she had profuse night sweats, severe cough, and expectorated about half a pint or more of light greyish yellow pus of a frothy nature (same as is usually seen in the last stages of consumption) in the course of twenty-four hours. Her shoulders were raised and brought forwards, the chest flat, and the clavicles very prominent—leaving a hollow. On auscultation there was that peculiar hollow gurgling sound at times heard over the right lung, and at others there was no sound to be heard of respiration at some points. The dyspnœa sometimes became so urgent that the friends several times thought her dying. Almost as soon as she fell asleep, she would break out into a profuse perspiration, and the little sleep she did get was not refreshing. There was an abscess on the right side of the spine, extending from about the second rib to the ninth or tenth, and about four inches wide, involving all the muscles of the back contained within that space. There was an opening about an inch and a half from the spine, over the region between the fifth and sixth ribs,

Although naphtha (medicinal) is not to be regarded as a speedy and certain *cure* in all forms and stages of phthisis, yet it almost invariably effects the most prompt and marked *relief* of the general symptoms, not only in the early, but in the most advanced stages of the complaint. This effect of the remedy alone would give it a title to rank very high as an article of the *materia medica*.

In conducting my enquiries into the value of naphtha in tubercular phthisis, I determined to exhibit it indiscriminately in all cases of the disease, whether they appeared to be favourable or unfavourable, and to collect a sufficient number of facts to settle the following questions, as well as my opportunities of observation would enable me to do.

1st. What substance, under the name of naphtha, was recommended by Dr. Hastings, and by what tests can it be recognized?

2nd. Whether this naphtha could be considered as a valuable remedy in any genuine cases of tubercular phthisis?

3rd. What were the particular forms and stages of phthisis especially benefitted, as indicated by the symptoms, and especially by the physical signs?

4th. What effect the naphtha exerted on the general symptoms? and also more particularly what effect on the physical signs (if any)?

5th. What is the *modus operandi*, and appreciable effects?

6th. What circumstances contra-indicate the use of naphtha?

which I enlarged by means of a bistoury, and kept open by the use of poultices. The abscess discharged constantly, and at one time nearly a pint of well marked pus.

“My great object in her case was to palliate her sufferings and merely make her as comfortable as possible during the time she might live. I told her friends to let her eat as much as she wanted, and anything in the way of ordinary food, also to let her have a small quantity of wine. Ordered the following mixture to be given at night, and at any time during the day when the cough was most troublesome.—℞ Gum. Acac. Ext. Glycyrrh. áá ʒ. Syr. Althææ, Træ Opii. áá ʒss. Vin Antim. gt x. Aquæ ʒiij.—Dose coch. amp.

“The patient gradually recovered, and in about four weeks from the time I first saw her, the cough had entirely left her, and she was gaining strength fast. The right side became much smaller than the left, owing to the chest’s shaping itself to the new condition of the lung. In about six weeks from the time I first saw her she left town, for Pough Keepsie, in better health, she said, than she had enjoyed for years. I gave her nothing of any importance besides cough mixtures similar to the one first ordered.”—*New York Journal of Medicine*, Sept. 1844.

CHAPTER II.

PHYSICAL AND CHEMICAL CHARACTER OF NAPHTHA MEDICINALIS.
EFFECTS ON TUBERCLE.

It will be obvious that it is of the highest importance to ascertain what substance, out of the many sold under the name of naphtha, proves medicinal. My own observations would lead me to the conclusion that *two-thirds* of those who have tried naphtha in consumption, including *all* those who have found the substance they have employed either useless or injurious, (and have thus apparently failed), *have not* used the medicinal naphtha which I have exhibited with constant relief, and in many cases with a curative effect, to my patients—being the same which Dr. Hastings recommends and employs. I come to this conclusion also from the difficulty which exists of obtaining with any certainty the proper remedy, and from the striking differences which exist in the published accounts of the physical properties of the substance and its effects, by most observers, and my own examinations and trials. A great variety of substances are sold under the name of naphtha, and it is difficult to obtain two specimens, even from the same shop, at different times, which do not present some shades of difference. White's, chemist, Piccadilly, and generally Bell's, Oxford-street, are the only two shops I have tried where medicinal naphtha can be obtained with any certainty. With the exception of the remedy I shall presently describe, I have found all other substances of the naphtha class either inert or (as is generally the case) *positively injurious*: hence I divide these substances into two classes—the medicinal and the non-medicinal.

The physical characters of the medicinal naphtha are as follows:—When pure it is a *colourless*, limpid liquid, readily miscible in all proportions with water and alcohol, having a specific gravity at 60° F. of about '800.

The smell is alcoholic and peculiar—being a compound smell

of alcohol and acetic æther, with something rather nauseous and bitter, but *by no means very unpleasant or disgusting*.

The taste is warm, alcoholic, and rather nauseous—far, however, from being either very unpleasant or disgusting. Patients have invariably told me, that although they could not consider the naphtha pleasant, still it was not at all worse to take than anything else bearing the name of medicine.

Hence if a liquid be offered for sale of a dark colour, oily appearance, or which becomes milky on the addition of water, it is obviously a non-medicinal specimen; so also if it possess a very nauseous, sickly smell or taste.

Specimens, however, may be found which agree in all these particulars, and yet belong to the non-medicinal class. I have several times tried a specimen which is more purely alcoholic in its taste and smell, and without the slight nauseous flavour and smell of the medicinal, which invariably disagreed with the patients, aggravated all the symptoms, and produced headache and sickness. These very patients had been previously much benefitted by the medicinal naphtha, and were again speedily relieved from all the distressing symptoms by returning to it, and by leaving off the liquid which disagreed.

The medicinal naphtha occasions a sense of warmth on being swallowed, usually followed by expulsion of flatus, soon succeeded by a comfortable sense of freedom of respiration, with relief of the distressing shortness of breath so constantly experienced by the phthisical. The peculiar odour of the medicine is imparted to the breath and sputa, and sometimes to the urine passed shortly after its use. In no case have I found the medicinal naphtha derange the stomach or bowels, or produce any unpleasant symptom. Hence if nausea, vomiting or purging, faintness, giddiness or headache follow the exhibition of any liquid used as naphtha, it should be rejected as a non-medicinal article.

The chemical characters of medicinal naphtha are essentially those of pyroxylic spirit (hydrate of the oxide of methule, C_2H_3O , aq., Liebig.) It is highly volatile, very inflammable, burning with a very pale blue flame; and the production of much heat, and boils at about $150^\circ F$. It is perfectly *neutral* to test paper, and is a ready solvent of iodine, essential oils, and resins,

dissolves sulphur and phosphorus with the aid of heat, in small quantities, but exerts no action on the fixed oils.

I submitted equal quantities of medicinal naphtha, and the non-medicinal (which I have mentioned as very closely approximating to the medicinal) to the following tests, in order to discover, if possible, some ready mode of distinguishing them.

Tincture of litmus and litmus paper suffer no change of colour on the addition of the medicinal naphtha, but are *reddened* in a marked manner by the non-medicinal.

Neither turmeric paper nor reddened litmus suffer any change on the addition of either the medicinal or the non-medicinal (this specimen *) naphtha.

ADDITION OF STRONG NITRIC ACID.

The medicinal (which I shall distinguish by *a*) is rendered of a pale reddish, slightly brown tinted, colour, when viewed by reflected light, more approaching to a pale salmon colour when viewed by transmuted light. The non-medicinal (which I shall distinguish by *b*,) is also rendered of the same colour.

ADDITION OF IODINE.

a and *b* both readily dissolve iodine without heat, and acquire the deep reddish-brown tint of the tincture of iodine; *b*, however, dissolves it much more readily, and in greater abundance;—in my experiments *a* dissolved x grs., *b*. xv. grs.

ADDITION OF ESSENTIAL OILS.

a and *b* both dissolve essential oils quickly and completely; *b*, however, more readily, and in greater abundance than *a*.

BOILED ON FIXED OILS.

a boiled on olive oil remains perfectly transparent, and the oil (at the bottom) unaffected.

b is rendered perfectly milky, with a notable diminution

* I have met with specimens which were sufficiently alkaline to restore the colour to very slightly reddened litmus paper, but these could be distinguished by their physical characters alone.

of the quantity of oil introduced. After standing three hours it became again perfectly transparent.

At this stage neither of the specimens communicated any greasy stain to paper.

ADDITION OF STRONG SULPHURIC ACID.

a and *b* on the addition of equal quantities of strong sulph. acid suffered violent ebullition, with great evolution of heat—becoming converted into an intensely chocolate-brown coloured liquid, with a peculiar smell.

In one experiment *b* was much paler coloured than *a*, forming a dirty brown liquid with brown flocculi.

ADDITION OF A SOLUTION OF THE OXALATE OF AMMONIA.

a. A number of delicate transparent needle-shaped crystals formed and fell to the bottom.

b. Similar crystals formed but in much greater abundance.

ADDITION OF A SOLUTION OF THE NITRATE OF BARYTES.

a and *b*. A very densely white cloud formed in both and slowly subsided.

The acid reaction of *b* was not neutralized by standing twenty-four hours over a considerable quantity of pulv. cretæ, prep.

a and *b*. Both are highly volatile. A little from each bottle, placed in a watch glass, takes fire on the approach of flame, and burns with a very faint pale blue flame, with the production of much heat, perfectly unattended by smoke—the products of combustion being chiefly aqueous vapour and carbonic acid.

a leaves a small quantity of aqueous residue; *b* none.

The following table will shew these features of each contrasted.

RE-AGENTS.	MEDICINAL NAPHTHA.	NON-MEDICINAL.
Sol. of Letmus, &c.,	No effect,	Reddens.
Turmeric Paper,	No effect,	No effect.
Strong Nitric Acid	Reddens,	Reddens.

RE-AGENTS.	MEDICINAL NAPHTHA.	NON-MEDICINAL.
Iodine,	Readily dissolves,	Dissolves half as much again, and more readily.
Essential Oils,	Readily dissolves,	More ; and more readily.
Fixed Oils (Boiled on)	Remains perfectly transparent,	Is rendered milkly.
Strong Sulph. Acid,	Converted in chocolate brown liquid,	Chocolate-brown liquid.
Sol. Oxal. Ammon,	Formation of needle-shaped crystals,	Needle-shaped crystal in greater abundance.
Sol. Nit. Barytes,	White cloud,	White cloud.
Combustion,	Aqueous residue,	No residue.

The most ready test is, therefore, to be found in litmus paper, which is reddened by the non-medicinal, but is unaffected by the medicinal. The other differences are rather in degree than kind—proving that the non-medicinal specimen, which I had previously found to act injuriously, is a stronger spirit, and an *acid* preparation, whilst the medicinal is strictly neutral.

Effects of Medicinal Naphtha on Tubercle.—Dr. Hasting's experiments show the solubility of tubercle in naphtha. In my post-mortem examinations of fatal cases, I cannot say that I have observed any peculiar appearances of diseased parts. But then, among the patients who have been taking naphtha, none have died, except where the changes of phthisis had been very extensive and very far advanced—cases, in fact, which did not admit of any curative influence being exerted.

The reviewer of Dr. Hasting's work in the *Provincial Medical Journal* (Dec. 23rd, 1843,) states that he had an opportunity of examining the lungs, post-mortem, of a patient who had been taking the pyro-acetic spirit two months previous to his death. "The medicine was not administered with the expectation of its effecting a cure, the case being perfectly hopeless from the period we first saw the patient. The lungs presented a very peculiar appearance. There was a large cavern in the upper lobe of the left lung. Both lungs were studded with tubercles of a

small size, varying from that of a filbert to that of a small pea. These presented a remarkably dry appearance, closely resembling those found in the mesenteric glands, which rarely suppurate, and of that character which tubercular matter assumes when in a state of transition from a crude to a cretaceous condition. None of them where in the slightest degree softened, and they did not seem as if they would ever suppurate. The large cavern in the left lung did not present any unusual character.”—page 232.

From the effects of the medicinal naphtha on the cases of tubercular accumulation (which I shall presently narrate), I am led to believe that the majority are absorbed, and the remainder brought into a condition which resists the usual changes of softening and suppuration—the irritation and inflammation of the surrounding tissues being at the same time relieved.

As regards the real nature of the medicinal naphtha, I believe that it must be regarded as pyroxylic spirit; being one of the products of the destructive distillation of wood. Pyro-acetic spirit obtained as a product from the destructive distillation of acetic acid, or of the acetates of lime or copper is a much more expensive substance (seven or eight times as expensive,—the pyro-acetic acid and being about 2s. the z i, medicinal naphtha 17s. the gallon). Hence, from the difference of price alone, it is obvious that it cannot be the pyro-acetic spirit. Pyroxylic and pyro-acetic spirits do not differ essentially in their physical properties, and chemical peculiarities; the atomic constitution of pyro-acetic spirit being $\text{C}_3 \text{H}_3 \text{O}$., and that of pyroxylic spirit $\text{C}_2 \text{H}_3 \text{O}$, Aq. Dr. Hastings informs me that he has used the spirit really obtained by the destructive distillation of an acetate, and has found it efficacious, but that he orders as a general rule the cheaper spirit which is obtained from wood.

CHAPTER III.

VALUE OF MEDICINAL NAPHTHA IN THE EARLY STAGES OF
PATHISIS PULMONALIS.

I WILL now pass on to consider the facts I have collected concerning the value of the medicinal naphtha in cases of genuine tubercular phthisis; premising that I have endeavoured to compress the details into as narrow a compass as will be sufficient to show the nature of the disease, and the operation of the remedy, as my object is not to illustrate the varieties of consumption apart from the consideration of the influence of naphtha on the various physical signs, symptoms, and stages, &c.

I will commence with some cases in the earlier stages of tubercular deposition. It will be seen that these are the cases in which the beneficial and curative influence of the medicinal naphtha is most prompt and decided. In almost every case the morbid general symptoms, and the physical signs have disappeared from its employment in a short time, and the patients, considering themselves perfectly cured, have ceased attending. In one or two instances, where the medicine has been left off prematurely (for it is difficult to persuade the poor to take medicine the moment they feel themselves nearly well), there has been a relapse, and it has been necessary to re-commence the treatment which has again produced its beneficial effects.

The *physical signs* in these cases will be found to have chiefly been more or less *flattening* of the upper and anterior part of the chest, from a diminution of the antero-posterior diameter, affecting most commonly the right side alone, then both sides, and less commonly the left side alone; *diminished respiratory play* of the affected portion of the chest; more or less *dulness* and *resistance* on percussion of the sternal end of the clavicle, and of the sub-clavicular region (especially at a little distance from the sternum) of the affected side; increased *resonance* of the *voice* and *heart sounds* over the dull portions; alteration of the

normal characters and rhythm of respiration, viz.—*loudness, harshness*, and sometimes *dryness* of both the *inspiratory* and *expiratory murmurs* with *prolongation* of the *expiratory*—sometimes *weakness or suppression of the respiratory murmurs*—these states passing into the slight diffused *broncophony* and *bronchial breathing*, which increases with the increase of the condensation, till the bronchial characters are more intense, and the voice is transmitted with the characters to which Laennec applied the name of imperfect pectoriloquy. These patients suffer from hectic fever in different degrees, pain in one or both shoulders, cough, generally hæmoptysis, and difficulty or rather shortness of breathing (breathlessness) with mucus expectoration. They have generally near relatives, who are suffering or who have died of consumption, (especially if they have attended much on their sick friends), and are often the children of phthisical parents.

CASE 1. *Tubercular deposition in the upper and anterior portion of the superior lobe of the right lung. Complete recovery from the influence of Naphtha.*—Henry Bonnar, ætat. 23, admitted under my care, at the Blenheim-street Infirmary, on the 2nd of March, 1844, resides at 50, Salisbury-street, Lisson-grove. Complains of indisposition, hectic symptoms, pain behind the centre of the sternum, and in the right shoulder, with slight cough, especially in the early morning, with expectoration of transparent mucus. These symptoms have come on gradually during the last two or three months. His father is at present (March) under my care, in an advanced stage of phthisis.

Physical signs.—Slight dulness of the sternal end of the clavicle, and of the upper and sternal portion of the sub-clavicular region of the right side on percussion; morbidly increased resonance of the voice and heart sounds; murmurs harsh, expiration prolonged.

Ordered Naphthæ Medic. ʒ v ex cyatho aquæ ter die.

March 9th. Slightly improved. To continue as before.

March 30th. Chest symptoms relieved; general health much improved. To continue.

April 6th. Complains of much general indisposition, and pain in the right shoulder. The dulness on percussion is sensibly

diminished since the last examination; murmurs less harsh; voice highly resonant.

To take an ounce three times a-day of the following mixture :
—℞. Inf. Gent. Comp. ʒviij, Naph. Med. ʒiij. M., to apply a blister over the sternum.

April 13th. General and local symptoms improved. To continue, and to produce and keep up an eruption over the front of the chest with the Ung. Autim. Pot. Tart.

April 20th. Improvement continues.

May 4th. Has neither pain nor uneasiness about the chest or shoulders; cough and shortness of breath greatly relieved; little or no expectoration; still continues to be fatigued, and to perspire freely from slight causes, and is subject to attacks of faintness. The dulness has entirely disappeared; the murmurs are soft and normal, but the voice is still slightly more resonant over the right sub-clavicular region than over the left.

May 11. Feels perfectly well, and has continued in the enjoyment of perfect health up to the present time (Sept. 1844.)

CASE 2. *Tubercular consolidation of the superior lobe of the right lung; complete cure under the employment of naphtha.*—Thomas Hills, ætat. 18, residing at 19, Riding-house-lane, was admitted under my care at the Blenheim-street Infirmary, on the 15th of January, 1844. He was seized with hæmoptysis about five months previously, whilst occupying himself in his master's stable, bringing up about "half a tea-cup full" of florid blood, since which period he has suffered from cough, attended by expectoration streaked with blood, apnæa, loss of health, emaciation, quickness of the pulse, and night sweats.

Physical signs.—Slight flattening of the antero-superior part of the right side of the chest, with diminished respiratory motion: dulness on percussion of the sternal end of the clavicle, and the superior portions of the sub-clavicular region. Respiratory murmurs harsh and loud; expiratory prolonged. Increased resonance of the voice and heart sounds over the dull portions.

Was ordered, Naph. Med. xv ℥ ter. die., in half a wine-glass of water.

January 31st. Hectic cough, and shortness of breath much relieved; expectoration diminished, and no longer streaked with

blood ; feels much better. Dulness on percussion diminished ; expiratory murmur less harsh and prolonged than previously ; other signs as before.

February 7th. Complains of pain in the epigastric region ; cough much less severe ; expectoration diminished ; breath much easier. General health very much improved. Dulness has nearly disappeared ; murmurs nearly normal.

February 14. States himself to be perfectly well. Dulness had disappeared ; murmurs normal ; voice equally resonant on both sides.

CASE 3. *Tubercular consolidation of the upper and anterior portion of the superior lobe of the right lung ; slight anasarca ; cure by Naphtha.*—Mrs. Hogan, ætat. 33, was admitted under my care on the 17th of February, 1844. She states her residence to be at No. 16, King-street, Drury-lane. The present symptoms, of which she complains, are cough, which is not severe except in the early morning, expectoration, shortness of breath, and slight anasarca ; the lower extremities, especially the feet and ancles, are œdematous towards night, and the face and eye-lids in the morning. The urine is voided in diminished quantity, is high coloured, free from albumen, and deposits the lithates on cooling. Countenance pale, anxious, and sallow ; pulse soft and feeble.

Physical signs.—The right upper and anterior surface of the chest is slightly flattened. The sternal end of the right clavicle and the right sub-clavicular region are duller, and offer more resistance to the percussing fingers than the similar regions on the left side. Respiratory murmurs harsh, loud, and slightly bronchial ; expiratory murmur is, in addition, much prolonged. Increased resonance of the voice and heart sounds. Respiratory murmurs on the left side strictly healthy, but somewhat louder and fuller than usual—*id est* exaggerated or puerile.

History.—About eight months since she suffered severely from menorrhagia and leucorrhœa, and although the menorrhagia was suppressed in a few weeks, it left her in a very reduced and debilitated condition. She dates her present constitutional and local ailments to this illness. Her cough commenced about eight weeks since, and has been attended by

slight hæmoptysis (coughing up one or two tea-spoonfuls of bright florid blood) on three or four occasions during the interval between its commencement and the present time, (February, 1844.) She first observed the ædema about a fortnight ago. None of her relatives, as far as she knows, died of consumption.

She was ordered two table-spoonfuls three times a-day of the following mixture:—℞ Naphthæ Med. ʒij, Inf. Gent. Comp. ʒviiij, M.

February 24th. Cough more troublesome; shortness of breath relieved; ædema diminished; health improved.

March 2nd. Cough much less troublesome, expectoration very trifling; has nearly lost her shortness of breath; ædema has completely disappeared. Dulness on percussion has disappeared; murmurs nearly normal; voice scarcely more resonant on one side than the other.

March 9th. States herself to be quite well. Auscultatory phenomena as before—some slight harshness and prolongation of the expiratory murmur remaining. Has not re-applied since.

CASE 4. *Tubercular consolidation of the upper lobe of the right lung. Cure by Naphtha.*—J. Jones, ætat. 18, residing at 20, New-street, was admitted as my patient at the Blenheim-street Infirmary, on the 17th of February, 1844. Complains of much breathlessness, and cough chiefly at night and in the early morning, attended with but scanty expectoration of mucus. Also of general indisposition, and hectic perspirations. His father is at present in a very advanced stage of phthisis. The present symptoms commenced three months since with trifling cough in the morning.

Physical signs.—The upper and anterior part of the right side of the chest renders a shorter and duller sound on percussion than the left, especially marked over the sternal end of the clavicle, and in the sub-clavicular region about an inch from the line of the sternum. Respiratory murmurs harsh and loud over the dull portions; expiratory prolonged. Voice and heart sounds unduly resonant.

He was ordered two table spoonful of the following mixture three times a-day:—℞ Mixt. Expect. (contains vin. Ipecac. and Træ Camph. Co.) ʒviiij, Naphthæ Med. ʒij, M.

February 24th. His health is greatly improved, and he feels much better in every respect. His breathing is much freer; cough and quantity of sputa diminished. To continue.

March 2nd. The improvement in the general and local symptoms have continued in the same ratio. The dulness has disappeared on percussion, and the murmurs normal with the exception of slight prolongation of the expiratory.

March 9th. Feels quite well. Murmurs normal; voice only very slightly more resonant than over the same regions on the left side.

Continued quite well in June.

CASE 5. *Slight tubercular consolidation of the superior lobe of the right lung. Great relief from Naphtha; omission of the medicine on every improvement; abscesses by the side of the vagina.*—Mary Ann Sly, ætat. 26, residing at 62, Newman-street, Oxford-street, was admitted under my care at the Blenheim-street Infirmary on the 17th of April, 1844. She has suffered from cough occasionally during the last two years, which commenced gradually, and has been accompanied on several occasions by the expectoration of small quantities of bright scarlet blood. Her father died of consumption, and several of her immediate relatives are subject to “coughs.”

At present she coughs chiefly in the early morning, and expectorates a thick, tenacious mucus, in which she has often noticed small solid bodies of a whitish colour. Nine months ago she gave birth to an infant rather prematurely, and shortly afterwards an abscess formed by the side of the vagina, and burst between it and the rectum. Since then she has had two similar attacks, and has suffered continually in the vagina, and about the anus. She complains also of shortness of breath, pain in the right shoulder, and of constitutional depression, and night sweats, &c.

On making an examination two fistulous passages were discovered on either side of the anus, about half an inch in depth—but neither passed deeper than the sphincter—also superficial ulceration about the entrance of the vagina, and its posterior wall. I was assisted in the examination by my colleague, Mr. Storks.

She was ordered fifteen minims of Naphtha Med. in a half wine-glassful of water three times a-day ; also a solution of the nitrate of silver (grains ij to the ounce of water) as an injection into the vagina.

Physical signs.—Slight dulness on percussion of the sternal end of the right clavicle, and upper part of the sub-clavicular region ; harshness of the respiratory murmurs, and prolongation of the expiratory. Increased resonance of the voice and heart sounds over the dull portions.

May 1st. Catamenia (which were previously suppressed) have recurred very profusely since she commenced the use of Naphtha. Feels slightly better ; breath and cough relieved.

May 24th. An abscess has burst into the vagina, preceded and followed by leucorrhæa. Catamenia have again returned, and with much relief to the local symptoms. Feels considerably better ; her breath and cough are very much relieved, and she has quite lost the pain in her right shoulder. Has been free for some time from the evening chill, followed by heat, and nocturnal perspiration, which she suffered from a few weeks back. The dulness on percussion has nearly disappeared, and the voice, &c., though still more resonant on the right than the left side, are less so than on the previous examination. To continue.

September 11th. Having felt herself nearly well, she has discontinued the medicine for some months. Again, she is not so well from some return of the cough, shortness of breath, &c. Complains of a return of pain also in the point of the right shoulder.

Right sub-clavicular region flattened ; respiratory motions slightly less free than on the left side : some dulness on percussion over the clavicle and the sub-clavicular region. Voice unduly resonant, and heart-sounds transmitted with morbid clearness. Respiratory sounds harsh ; expiratory murmur prolonged. To return to the Naphtha mixture.—Believes herself to be again pregnant.

CASE 6. *Tubercular Consolidation of the superior portions of the upper lobes of both lungs. Cure by Naphtha.* Jane Comber, ætat. 18, residing at 25, Little Portland-street,

Soho, was admitted under my care at the Blenheim-street Infirmary on the 17th of April, 1844. Has had cough, difficulty of breathing, mucus expectoration, and hectic symptoms for some months; these symptoms having first commenced about six months since. In the commencement of her illness she was seized with a sense of oppression, and of load at the epigastrium, with sickness, and vomited about a tea-cupful of dark-coloured blood, and had two attacks of a similar nature following each other at short intervals. She is of a phthisical family, several near relatives having died of phthisis. The catamenia are suppressed, and have been so since the commencement of her illness. She is very fair, and presents a very exsanguine appearance.

Physical signs.—Considerable dulness and resistance on percussion of the sternal ends of the clavicles, and the sub-clavicular regions of both sides; bronchial breathing and bronchophony; heart-sounds transmitted with morbid clearness.

She was ordered xv m of Naphtha Med. three times a-day in half a glassful of water; Emplast. Cantharid. Sterno.

April 23rd. Has felt much better ever since she commenced the drops; has much more freedom of breathing: cough less, expectoration diminished; pain in the shoulders has disappeared.

May 1st. The catamenia have recurred since last date, and although her breath and cough are better, still she does not feel so well generally. To continue drops, and to rub the Unguent. Antim. Pot. Tart. in over the front of the chest.

May 24th. Has been in the country during the last three weeks, and has returned, feeling much better.

June 5th. Has continued to improve in the same ratio in all respects. The dulness on percussion has nearly disappeared; respiratory murmurs normal, but loud; voice and heart sounds much less resonant than on previous examination.

June 12th. Still improving. To continue.

September 4th. Has passed the last two or three months in the country, and now feels quite well, only has a very slight cough occasionally. Dulness on percussion has entirely disappeared; murmurs normal; resonance of voice healthy.

CASE 7. *Tubercular consolidation of the upper part of the*

superior lobes of both lungs, especially of the right side. Cure by Naphtha. Louisa Willett, ætat 22, residing at No. 422, Oxford-street, was admitted on the 27th of March, 1844. She complains of cough, shortness of breath, expectoration of transparent mucus, and pain in the upper part of the chest by both shoulders. These symptoms commenced about six months since. Her mother is at present ill with consumption; other friends healthy. Face florid; slight emaciation, pulse 100, and feeble; suffers from hectic symptoms.

She was directed the Emplastrum Canth to the front of the chest, and five grains of the Pil. Conii Comp. twice a-day.

April 13th. *Physical signs.*—Sternal ends of both clavicles and the sub-clavicular regions dull on percussion, especially on the right side; respiratory murmurs harsh and loud, and the expiratory prolonged on the right side anteriorly, with diffused broncophony, and heart-sounds transmitted with unnatural clearness. Feebleness of the respiratory murmurs on the left side anteriorly; sibilant rhoncus of the left scapular region.

Ordered Emp. Canth. to the front of the chest; Naphtha Med. xv m. three times a-day ex aquâ.

April 17th. Chest symptoms improved, but complains of head-ache, from which she has suffered occasionally for some years.

April 20th. Head-ache continues; health improved; cough and breath better. Emp. Canth. Nuchæ. To continue.

April 27th. Cough very troublesome; head-ache better; pain in the chest; bowels confined. Unguent. Antim. Pot Tart. to the front of the chest; Pulv. Jalapæ Com. ʒj, p. r n.

May 1st. Symptoms continue as before; but complains of uterine irritation, and great nervous excitability. To continue; also five grains of Compound Galbanum pill twice a-day.

May 8th. Feels better in all respects; head-ache less, but complains of heat of head and pulsation; countenance flushed. Four ounces of blood to be taken from the nucha by cupping. To continue, drops, &c.

May 15th. Head less troublesome; less pain in the shoulders; breath much easier; cough troublesome. Less dulness on percussion; respiratory murmurs nearly normal;

voice slightly more resonant on the right than the left side. To add one minim of Hydro-cyanic acid (Scheele's strength) to the Naphtha.

May 18th. Cough less troublesome; feels generally much better; breathing difficult only on occasions.

May 25th. Chest symptoms continue to improve; more pain in the head. To continue; also Cucurbitulæ Cruent. Nuchæ. ad. ʒiv . Pil. Coloc. Comp. x grs. (in two pills) to be taken occasionally.

June 1st. Some improvement.

June 8th. Chest symptoms better; head-ache continues. Sounds on percussion nearly normal, on the right side alone being slightly duller than natural, and than the left side, when the chest is filled at the end of inspiration. Inspiratory murmur somewhat loud during ordinary breathing; expiratory relatively normal during ordinary breathing, but prolonged after a deep inspiration; voice and heart sounds slightly more resonant than natural on the right side.

June 12th. Complains much of headache, and does not feel so well. A seton to be placed in the back of the neck. 22nd. Chest symptoms nearly well; headache continues. Under my colleague, Mr. Stork's, care for diseased thumb (the left) which came on from a slight burn, and has evidently given rise to diseased bone. Auscultatory phenomena as before; viz., prolonged expiratory murmur after a forced inspiration, with slight dulness on percussion. To continue.

29th. Not quite so well; to have eight minims of the Liq. Opii. Sedit. added to each dose of the drops. July 3rd. Head-ache very bad; seton has been removed from the inflamed state of the back of the neck. To continue the drops, and to take Quinæ Disulph j grn., Hydrag. e Cretâ iij grs Omni Nocte. also Pulv. Jalapæ Comp. ʒi . p. r. n. 17th. Chest symptoms nearly well; headache continues; thumb exceedingly bad. To continue. 27th. Respiratory murmurs on the right side are now perfectly normal during ordinary breathing; expiratory very slightly prolonged after forced inspiration; voice sounds alike on both sides; no dulness on percussion.

Aug. 17th. Chest symptoms quite well; headache much

better ; sounds on percussion alike on both sides, also voice and heart sounds ; murmurs perfectly normal. Thumb continues very bad. Going to the Margate Infirmary to-morrow.

Remarks. In selecting the seven cases I have here narrated of phthisis in its early stages, I have rejected every case in which I have exhibited the medicinal naphtha, where the slightest doubt could be entertained, by even the most prejudiced person, of the nature of the affection. I have used the remedy, however, in a still earlier stage of the disease, with even more rapid and marked success. In my own mind I had no doubt of the phthisical nature of the cases to which I allude, but as a doubt might have been raised in the minds of others, and the diseases were entered in my own books as phthisis ? I deemed it best entirely to omit their consideration. I shall mention, however, every case of undoubted tubercular phthisis, whether favourable or unfavourable to the employment of naphtha.

Of these seven cases it will be seen that the disease was confined to the superior lobe of the right lung in five, and affected the superior lobe of both lungs in two cases only—the disease apparently commencing and being most advanced and marked in the right lung in every instance. In every case also on the *right* side, the respiratory murmur was *harsh* and *loud*, and the expiratory not only much louder and harsher than natural, but also *prolonged* in a marked degree. In the two cases which also affected the left as well as the right lung, the respiratory murmurs were very *faint* on the *left* side in one instance, *bronchial* in the other.

In healthy chests a difference has been ascertained frequently in the manner in which respiration is accomplished under the two clavicles. Dr. Gerhard of Philadelphia, in his work on the “ Diagnosis of Diseases of the Chest,” states that he has known for some years the remarkable fact, that the respiration is always blowing at the apex of the right lung, and not at the left. He attributes this peculiarity to three circumstances.—“ 1st. The vicinity of the bronchi to the trachea ; 2nd. the straightness of their course ; 3rd. their greater width.” In order to ascertain with accuracy the characters of this difference, Louis submitted to very careful examinations twenty-two young females from 15 to 20, who

had never experienced the symptoms of any affection of the thoracic organs. In all, with the exception of two cases, the inspiratory murmur was gentle and soft under both clavicles, and to the same amount under each. One of the exceptional cases was thin in person, aged 20, in whom inspiration was less soft, and stronger than in the natural state under the right clavicle. The other was that of an equally young female, in whom the sound of inspiration was stronger and fuller under the left than the right clavicle. The sound of expiration was nearly inaudible under the left clavicle in the majority of cases—thirteen times out of twenty-two; whereas the contrary was the case on the right side, where the sound of expiration was inappreciable in five cases only. In the others expiration was distinctly audible, and sometimes very much prolonged. This sound posteriorly was inaudible on the left side in fourteen cases; it was only five times wanting on the right side; and in cases where expiration was audible on both sides, this was more marked and prolonged, sometimes to a very considerable degree, on the right than the left side. In one young girl, besides being prolonged under the right clavicle, expiration was harsh, and as it were bronchial in that situation.

Louis infers from these experiments “that slightly prolonged expiration at the upper part of the right side of the chest is, considered in itself, of little value as a diagnostic sign of tubercles; and that it is much more significant on the left.”

In these twenty-two subjects also Louis found marked resonance of the voice under the right clavicle ten times—in four to a considerable amount; whereas it existed in one case only on the left side (and here to a slight amount only) in a thin female of 24 years of age. Posteriorly, on the left side, resonance of the voice existed to a very slight amount in this woman only at the apex of the lung; whereas it existed on the right side in the corresponding situation, and with much greater intensity in eight individuals, in whom the expiration was prolonged. Hence it follows that slight resonance of the voice is not a phenomenon of equal diagnostic value at the right and left apices of the chest. It is likewise inferrible that it always possesses a certain share

of importance on the left side, more especially if it be not present on the right ; whereas the contrary is the case with the latter side.

In all the cases I have hitherto narrated, in which naphtha was given, prolonged expiration was by no means an isolated phenomenon ; it was invariably attended by harshness of both inspiratory and expiratory murmurs. Dr. Walshe (Diagnosis of Diseases of the Lungs, page 194) states that he has never yet met with any expiratory murmur of notably increased duration unattended by a change of *special character*, and therefore cannot but strongly doubt the correctness of those writers—for example M. M. Barth and Roger—who describe *prolonged expiration* as an isolated phenomenon. He admits, however, that in some cases the increase of duration is much more marked, and therefore more important in diagnosis. Dr. Walshe also very justly remarks that the value of the prolonged expiratory sound has been exaggerated as a diagnostic sign of tubercles. What may appear in one person (in comparison with another) as *prolonged expiration*, is really in him a natural state ; many confound with it the pharyngeal expiratory sound, and few seem to be aware that under whatever circumstances an obstruction exists to the free circulation of air in the lungs, the expiration will be prolonged.

Prolonged expiration may with care be readily distinguished from pharyngeal murmurs. No interval of time exists between the inspiratory and expiratory murmurs, the termination of the former being lost in the commencement of the latter. The occurrence of a distinct interval of time between inspiration and expiration, and the sensation of *distant* production, which is a feature of pharyngeal murmurs, are sufficient to distinguish them from true pulmonary sounds. The inexperienced may avoid error by directing the patient to close his mouth if previously open, or open it if closed ; true pulmonary sounds will be unaffected by the change, but if in the pharynx they will be altered in character.

Dulness on percussion existed in each of the seven cases with more or less increase in the natural resistance of the percussed parts. This was ascertained by careful comparative percussion of different parts of the same side of the chest, and of similar parts of the two sides.

Slight *flattening* of the antero-superior parts of the affected side of the chest, from diminution of the antero-posterior diameter, occurred in three instances, (cases of Hills, Hogan, and Sly), and was attended by a perceptible diminution of the respiratory movements in Hills and Sly, when the fingers were placed on corresponding portions of the two sides of the chest and the patient breathed deeply. The time at which this flattening occurs is by no means always uniform, being sometimes much earlier in one case than another. In the case of Hills, the earliest symptom of any chest affection was hæmoptysis, which occurred five months previous to my first seeing him. In the case of Hogan, she had been ill eight months, but had experienced cough only eight weeks. No flattening was present, at the end of May, in the case of Sly, but having omitted to continue her medicine from June to September, her disease, which had been previously relieved but not cured, advanced in the interval, and some decided flattening was present when she again came under my care. In this last instance only was there any complaint of pain in the shoulder, whilst this symptom was equally urgent in all the other cases, with one exception, where flattening of the chest did not exist; hence if this pain in the shoulder be regarded as an indication of pleuritic inflammation, and its absence as a presumption that no such complication at that time existed, there would seem to be no necessary connexion between the flattening which so commonly occurs in an early stage, and the existence of plastic exudation which has bound down, and contracted the affected portion of lung.

In Mr. Sibson's interesting paper in the 12th vol. of the "Trans. of the Provincial Medical and Surgical Association" he asks the question, "Why does the bulk of the affected portion of lung diminish in phthisis before the stage of softening and evacuation of the morbid structure?" This gentleman believes that the non-expansion of the unaffected air-cells that compass those diseased is the cause of the contraction of the diseased portion of lung, when it has not advanced to softening and expulsion. The inflamed or distended condition of the lung tissue would be stretched and irritated by the inspiratory distension of the air-cells.

Fournet has, however, invariably found the apex of the lung invested with thick and dense false membrane in cases of depression, and he attributes the chief share in its production to the contraction of the plastic matter forming this membrane. Dr. Walshe, also, has never seen notable depression (exclusively of cases of cavity) unless when there was pleural false membrane in considerable quantity present, and believes that both the atrophy of the lung and contraction of plastic matter exuded into its substance have their influence in producing the depression. Not having had any opportunity of examining, post-mortem, the chest of any individual, at so early a period as those cases I have narrated, in which I had remarked flattening during life, I am unable to decide the point from my own experience. In more advanced disease, and at a much later stage, however, I believe the statement to be correct.

In most of the cases, where disease was confined to one lung, the *respiration* in the corresponding portions of the opposite healthy organ, although strictly normal in character, has been somewhat *exaggerated* or puerile. Mr. Sibson imagines that the fainter forms of pleuritic friction sounds are often mistaken for puerile respiration. This I should be inclined to doubt very much. "It is," he remarks, "usually over the most healthy (the least diseased), the most expanded, and expanding, and the most resonant lung, that the friction sound—commonly taken for puerile respiration—is heard; it is, too, on the least diseased side that the crepitating noise is generally noticed."—page 498. He describes it as of a hissing or rushing, slightly interrupted character, resembling puerile respiration. It is louder during inspiration than expiration, but is usually present during expiration, and is audible when the patient whispers—occasionally giving a peculiar, fine, buzzing accompaniment to the vocal vibrations.

As we have seen the voice may be slightly more resonant on the right side of the chest superiorly in a perfectly healthy condition of the lungs, than on the left. In every case the *voice* and *heart-sounds* were unduly *resonant*, much more so than they ever occur in a state of health. Undue resonance of the heart sounds on the right side is, taken with other signs, of consider-

able value, inasmuch as it never occurs except the portion of lung corresponding to it be in a state of unnatural solidification.

Hæmoptysis occurred in the cases of Hills, Hogan, and Sly—more or less scarlet blood, in a pure state, being coughed up, whilst hæmatamesis was an early symptom in the case of Comber. The catamenia were suppressed in both Sly and Comber at the time of the hæmorrhage. Hæmoptysis was the *earliest* symptom in Hills, a very *early* one in Hogan, also an *early* one in Sly. The case of Comber (although she believed herself to have vomited the blood, and it was dark-coloured) may have been hæmoptysis, since Louis states that the blood voided by hæmoptysis is sometimes blackish and coagulated, and accompanied with contraction of the diaphragm, whereby the patients are led to suppose they have vomited the fluid discharged.

Louis' experience leads him to believe that genuine hæmoptysis scarcely, if ever, occurs, unless tubercular disease be present, except in individuals who have received some severe contusion of the chest, or in women whose catamenia have been suddenly suppressed, and he is "of opinion that hæmoptysis, if it be somewhat severe, and have not occurred under the exceptional circumstances alluded to, denotes with infinite probability, no matter what have been the period of its occurrence, the actual presence of some tubercles in the lungs. I do not say that it does so with certainty, for several cases, of the correct observation of which no doubt can be entertained, appear to constitute fortunate exceptions to the general rule."—(Walshe's Translation, page 168, 2nd edition). Hæmoptysis is not an *invariable* symptom of tubercular deposition in the lung, but an *exceedingly* common or *usual* symptom of such change, and one which very rarely occurs from other diseases.

The *catamenia* were *suppressed* in two out of the three cases occurring in females, which I have described; in both the function was restored, and at first somewhat profusely, from the influence of naphtha. I attribute this to the beneficial influence of the remedy on the general health, and not to any specific influence of the naphtha on the uterus—although I have not tried the remedy in any case of simple amenorrhæa.

The peculiar *pain* in one or both *shoulders* which phthisical patients so commonly suffer from, occurred in four out of the seven cases. I have found that whenever the tubercular disease is sufficiently advanced (especially when softening of the tubercular masses has or is taking place) that percussion, practiced over the diseased portions, generally gives rise to a sense of irritation and uneasiness, with a disposition to cough, and sometimes actual pain.

All the cases, with the exception of Hills and Hogan, were of phthisical families. One or both parents were phthisical in Bonnar, Jones, Sly, and Willett, besides having other near relatives phthisical. Neither parent was phthisical, only near relatives, in the case of Comber. The father was phthisical in three of the four cases, the mother in one only. Hills and Hogan spoke doubtfully, they had lost many near relatives, but did not know whether they died of consumption or not.

I have several times diagnosed a very early stage of tubercular phthisis (where the progress of the case has shewn its accuracy) from hæmoptysis, slight cough without expectoration, or very slight mucus sputa, hectic, shortness of breath, &c., occurring in an individual of a phthisical family, with some increased *resonance* of the *heart-sounds* and voice over the superior regions of one side of the chest, harshness of the respiratory murmurs, and prolongation of the expiratory, or weakness or suppression of the murmurs, before there has been any alteration of shape or dulness on percussion.

CHAPTER IV.

VALUE OF MEDICINAL NAPHTHA IN MORE ADVANCED PHTHISIS PREVIOUS TO SOFTENING OF THE TUBERCLES.

I WILL now pass on to consider the operation of Medicinal Naphtha in more advanced cases of phthisis, but still before the occurrence of softening.

Tubercular consolidation of the superior lobe of the right lung.

Cure by Naphtha.—CASE 8. Ellen Donovan, ætat 26, residing at No. 10, Carey-street, Grange-court, was admitted under my care at the Blenheim-street Infirmary, on the 12th of June, 1844. Her father, mother, two sisters, and a brother have died of consumption. Her mother, who had been apparently in the enjoyment of very good health previous to her father's illness, was seized with phthisical symptoms, after a long and painful attendance on her father. She states that she has herself been ill about two months, that she had been always delicate and apt to suffer from cough. Two months ago she spit up "two or three mouthfuls" of bright florid blood, and the sputa have been more or less streaked with blood ever since. She has emaciated gradually during her illness, and the catamenia have become gradually suppressed. Her cough at present is not very severe, but occurs especially in the early morning, and from any exertion, and she suffers from shortness of breath. The sputa are thick and opaque, viscid, and in small quantities. The pulse are habitually small and frequent, and she suffers from a state of hectic, with evening chills, followed by heat and nocturnal perspirations. She perspires freely from slight causes—such as excitement or exertion—and is so feeble and breathless that she becomes fatigued almost without any exertion, so much so as to render her almost incapable of undertaking any thing which requires exertion. She complains of pain in both shoulders, and opposite the centre of the sternum, extending to the right side.

Physical signs.—Right upper and anterior part of the chest is flattened, and possesses less mobility, on a deep inspiration, than the left side. The right sub-clavicular and scapular regions and the sternal end of the right clavicle yield a very dull sound, with increased resistance on percussion. Breathing in the axilla and over the regions already mentioned bronchial; voice highly resonant, amounting to diffused broncophony; heart sounds very loud and clear over the dull portions. She was ordered xv ℥ of Naph. Med. in water three times a-day.

June 15th. Feels considerably relieved; her cough, but especially her breath, are much better. To continue, and use an alum lotion with the female syringe for leucorrhœa. 19th.

Continues to improve in her general health, but complains of pain in the region of the right scapula. Auscultation discovered, in addition to bronchial breathing and broncophony, occasional large moist crepitation (*mucus rhoncus*) over the whole of the infra-spinous division of the scapular region. Auscultatory phenomena in front as before. To continue.

June 22nd. Her breath and cough, &c., are very much relieved, but she feels very weak and low. She again spit up about a tea-spoonful of florid blood last evening, after taking a longer walk than usual. The physical signs remain nearly as before; these being diffused bronchial breathing and broncophony anteriorly, laterally, and posteriorly over the upper part of the superior part of the right side of the chest. The large crepitation continued over the scapular region, which at the inferior angle almost amounted to gurgling—having a hollow, somewhat metallic, character.

She continued to improve steadily, and was much better in her general health and chest symptoms on the 26th and also on the 17th of July. To continue.

July 27th. Is considerably better in her general health, breath very much relieved, cough and expectoration diminished; has no pain in any part of the chest. During the last week has had an attack of bilious diarrhœa, which has now ceased. The right sub-clavicular, clavicular, and super-clavicular regions remain considerably flattened, with less respiratory play than the left side; the upper part of the right side of the chest is still decidedly duller on percussion than the left, both anteriorly and posteriorly; murmurs harsh, with prolonged expiration; voice and heart sounds unduly resonant, but by no means so much so as on the previous examination—especially the resonance of the heart sounds. Left side perfectly normal. To continue.

August 10th. Has not been so well during the week, which she attributes to getting her feet wet: during this time she spit up small quantities of blood, and suffered from diarrhœa. She is now again much better. Physical signs nearly as before with some sibilant rhoncus on the left side.

August 28th. Has felt nearly well till a few days since, when her throat became sore. Her throat is now well, but she

coughed up "two mouthfuls" of blood last evening, and her sputa have continued to be streaked with blood to-day. On the whole, however, she feels both better and stronger; the cough and breath much better—she was almost as well as she used to be before her illness some few days since. Dulness on percussion has nearly disappeared, and the respiratory murmurs are perfectly normal. Complains of pain on percussion over the inter scapulæ region, on the left side. To continue. To rub in the Ung. Ant. Pot. Tart. over the front of the chest.

September 14th. Feels quite well.

September 21st. Is now, she states, in better health than she has been in for years, although this is not robust; she has neither cough nor difficulty in breathing, except occasionally from any unusual or violent exercise. The flattening of the superior part of the right side of the chest anteriorly continues, but the two sides are equal in their respiratory movements. There is no dulness on percussion, and the respiratory murmurs sound exactly alike on both sides (expiration being audible on both sides and slightly more prolonged than usual—somewhere about one-third the length of inspiration—instead of about two to ten). Heart sounds are not unduly audible on the right side, but the voice is considerably more resonant over the upper part of the right side, both anteriorly and posteriorly, than the left. Still to continue the Naphtha. Catamenia restored.

CASE 9. *Tubercular Consolidation of the superior lobe of both lungs: Great improvement in the general symptoms, and relief of the indurated portions of lung, as indicated by the physical signs; relapse of the symptoms and occurrence of some laryngeal disease.* Elizabeth Cooper, ætat 39, a waistcoat maker, residing at 30, University-street, was admitted at the Blenheim-street Infirmary under my care on the 1st of June, 1844. Her father and sister both died of consumption. She has herself been ill five months, and her ailments commenced with severe cough, pain behind the centre of the sternum, &c., which attack she believed to be "influenza." Many of the same symptoms, although relieved, have continued to the present time. She has spit "two or three tea-spoonsful" of pure blood this morning for the first time, and has continued to cough up small quanti-

ties with the sputa since. She has emaciated much since the commencement of her illness, and has felt very poorly, nervous, and breathless.

At present her cough is very troublesome, especially in the early morning, and she expectorates a yellow, sometimes a white, mucus in tolerable quantity, whilst her breath is constantly difficult and very short. Her pulse are small, quick, and feeble, and she often suffers from slight chill, followed by heat, but rarely by perspiration. She has, and continues to suffer occasionally from pleuritic pains in the shoulders, and sense of much external heat. Catamenia suppressed.

Physical signs. Flattening and diminished motion of the antero-superior portions of the left side of the chest; dulness on percussion with increased resistance, of the sternal end of the clavicle and of the sub-clavicular region of the left side; increased resonance of the voice, and sounds of the heart morbidly clear over the dull portions; respiratory murmurs harsh and loud, with greatly prolonged expiratory—being nearly as long as inspiratory. She was directed xv ℥ of Naph. Med. in half a wine glass of water three times a day.

June 5th. All the symptoms are much relieved, and she feels much better; the expectorated matters are diminished in quantity; cough less; breath much freer.

June 15th. Continued to improve considerably till yesterday, when from having over exerted herself she spit up in coughing about two table-spoonsful of bright blood, which continues to colour the sputa of a bright scarlet colour. The dulness on percussion has diminished, the respiratory murmurs are less harsh, and the expiratory less prolonged.

Symptoms considerably improved on the 22nd. Not quite so well on the 29th. Has spit blood in small quantities this morning, mixed with sputa, which still continues coloured, and complains of pain in the left shoulder. She feels better since the occurrence of hæmoptysis. The left antero-superior part of the chest is rather duller than on the previous examination, and percussion excites uneasiness and disposition to cough; respiratory murmurs as before; right side normal.

July 1st. On the previous date she was supplied with the

non-medicinal naphtha (which I have mentioned as very closely resembling the medicinal) which has disagreed considerably with her each time she has taken it. It has produced pain in the chest, severe cough, great difficulty of breathing, and much expectoration of bloody mucus. To omit naphtha, and to take \mathfrak{z} i of Mist. Expect. three times a day. She improved gradually, and returned to the naph. med.

August 10th. Feels much better; cough and expectoration diminished; breathing much freer and easier; has taken Naph. Med. with Pot. Nit. and v \mathfrak{m} of Lig. Opii Sed. three times a day for the last fortnight. To continue. Left side as before; right side slightly dull on percussion, with some harshness of murmurs, and increased resonance of voice and heart sounds.

15th. Symptoms much improved; emaciation continues. 24th. Improvement continues.

September 7th. Complains much of dyspeptic symptoms, with pain opposite the inferior angle of the right scapula. Complains also of pain in both shoulders. In other respects as before. Flattening of the left side of the chest anteriorly continues, and some of the right; respiratory motions diminished; dulness and resistance on percussion diminished on both sides; murmurs normal both anteriorly and posteriorly; a faint rubbing sound beneath the acromial end of the left clavicle. She was ordered two table spoonsful of the following mixture three times a day: (\mathcal{R} Naphthæ Med. \mathfrak{z} ij, Inf. Gent. Comp., Aquæ Menth Pip. $\mathfrak{a}\mathfrak{a}$ \mathfrak{z} iv, M.) and to rub in the Ung. Antim. Pot. Tart. over the front of the chest—Pil Saponis \acute{e} opio, v grs. Omni Nocte.

September 11th. The tongue is covered with aphthous ulcerations; in other respects much better; dyspeptic symptoms less troublesome; cough and sputa less; breath better. To continue mixture, and use an alum gargle, also to apply borax and honey to the ulcerations.

September 16th. Has not had medicine for some days, and her breath is much worse in consequence. Complains of considerable pain in both shoulders, with augmented heat of the parts. Dyspeptic symptoms very troublesome—especially flatulence; tongue better. Percussion elicits a slightly duller sound on the right side superiorly than the left, but is very slight on

either side. Murmurs harsher on the right side than the left; a single dry click was heard with inspiration on the left side; no rubbing sound; voice and heart-sounds very slightly more resonant than natural. Flattening of both sides and diminished motion, especially the left. Emaciation increases. To continue. Has bad nights. To take nightly ℥viii of Liq. Opii. Sed. with i ℥ of Hydro-cyanic Acid, with ℥j of water.

September 19th. From having lost her Infirmary paper she has had no medicine, and again feels much worse. The hectic, the cough, expectoration, and difficulty of breathing are all more severe. 22nd. The bad general symptoms continue, although she obtains relief from flatulence, and the difficulty of breathing by taking the mixture, and has completely lost all pain in the shoulders and chest. Has no appetite; tongue red and slightly excoriated, with two or three ulcerated patches of small size; no pain in any part of the abdomen. Has not continued the night draughts as she experienced giddiness and confusion from them the next morning. During the two last nights she has awoken more than once with pain about the glottis, and urgent sense of suffocation—the laryngeal dyspnœa continuing for some time—also dysphagia, and sense of suffocation on attempting to swallow anything solid. Emaciation increases; pulse 110, feeble. The upper and anterior part of both sides of the chest are flattened; respiratory motions nearly equal; sound on percussion alike on both sides—slightly duller than the upper part of the mammary region. Inspiratory murmur over the dull portions anteriorly on the right side slightly harsher than natural; no expiratory murmur to be heard; a few moist crackling sounds heard over a limited space, beneath the clavicle near the sternum; voice and heart sound not excessively resonant. Nothing morbid to be heard on placing the stethoscope over the larynx. 24th. Laryngeal dyspnœa and dysphagia increased: paroxysm comes on during sleep. Occasional tracheal rhoncus. The tongue continues very sore, and is covered with aphthæ. To continue, and to take three grains of Pil. Hydrarg. every other night; a blister to the upper part of the thorax.

CASE 10. Rosina Bellilo, ætat 7, resides at 18, Cateaton-street, City, was admitted under my care at the Blenheim-street

Infirmary, on the 6th of March 1844. She has been remarkably subjected to catarrhs from birth. She is a delicate looking little girl, with a circumscribed flush on the cheeks. All her friends are healthy with the exception of the mother, who is considered consumptive. Her present attack became worse about four weeks ago; since which time her cough has increased gradually. She has coughed up three or four times pure blood in quantities of "about a tea-spoonful," and although so young expectorates an opaque mucus in considerable quantities. She has emaciated much during her illness, and suffers considerably from evening fever, night sweats, and other indications of hectic. Pulse small and rapid; appetite deficient; bowels regular and healthy.

Physical signs. Flattening, with diminished respiratory motion, of the upper and anterior part of the right side of the chest; dulness and increased resistance on percussion over the clavicular and sub-clavicular regions of the right side; bronchial breathing, and diffused broncophony, amounting in some places to Laennec's imperfect pectoriloquy over the dull portions; puerile respiration over the corresponding portions of left side. Sibilant and sonorous rhoncus heard over the scapular and inter scapular regions. To apply a blister to the chest, and to take x m of Naph. Med. in water three times a day.

April 17th. Her general health and chest symptoms are very considerably improved. Parts less dull on percussion; respiratory murmurs harsh, and expiratory prolonged; rhonci have disappeared. To continue.

May 18th. I was informed by her mother, who applied for her medicine, that she was almost well, and promised to bring her for my inspection. I have not seen her since.

CASE 11. *Tubercular consolidation of the superior lobe of the right lung; great benefit from Naphtha.*—Robert Wilson, ætat 35, residing at 53, Castle-street East, Oxford-street, was admitted under my care at the Blenheim-street Infirmary, on the 15th of June, 1844. Has been an invalid, and suffered from cough and difficulty of breathing, with occasional periods of improvement, for nearly three years. Three months since spit blood for nine consecutive days, in quantities varying from one quarter to half

a pint on each day. His father died from consumption, and several near relations suffer from "cough." He has lately lost flesh, and has felt himself inadequate to do anything requiring exertion. He suffers much from shortness of breath, and a distressing cough—especially in the early morning. Sputa thick and opaque; pulse quick and weak; suffers from nocturnal paroxysm of fever. He has an occasional severe pain in the right shoulder, and a peculiar spasmodic muscular pain in the left hypocondriac region, which first came on during the violent straining of vomiting, and now prevents a deep inspiration, and free coughing.

Physical signs. Flattening with diminished motion of the upper part of the anterior surface of the right side of the chest. Right anterior and superior portions of the chest very dull, and resisting on percussion, especially over the second and third ribs near the sternum; increased resonance of the heart-sounds and voice over the dull portions; respiratory murmurs anteriorly and laterally harsh and loud over the superior part of the same side, expiration also much prolonged. Left side, corresponding to the diseased portion on the right, sounds well, with slightly exaggerated respiration.

He was directed to rub in the unguent. Antim. Pot. Tart., and to take xv m of Naph. Med. in water three times a-day.

June 19th. Slightly improved; tongue coated with a thick yellow fur, and complains of an unpleasant bitter taste in his mouth of a morning, with uneasiness at the inferior angle of the right scapula. To continue, and to take three grains of blue pill every other night. 22nd. Says that he does not feel better in his general health, although he has much better nights, and his breath is by no means so short as it was. Dulness on percussion and resonance of heart sounds less considerable than on previous examinations. To continue.

June 26th. States that he feels much better, his breath is much freer, his cough easier, and his expectoration diminished and less purulent; sleeps very well. 29th. Continues to improve, and has lost all pain in the superior part of the right side of the chest, and by the scapula; pain in the left side easier and only occasional. Cough and breathing very much relieved; expectora-

tion diminished. Chest sounds much better on percussion, the heart sounds are less resonant, and the respiratory murmurs less harsh with less prolongation of the expiratory.

July 3rd. Chest symptoms and his general health continue to improve, but suffers much from hæmorrhoidal tumours, for which he consulted my colleague, Mr. Storke.

July 17th. The non-medicinal naphtha (most nearly resembling the medicinal) was given him on his last application for medicine, and he was very ill, with great increase of his chest symptoms during the few days he took it. Found himself so much worse after each dose that he omitted its use. Being again supplied with White's, is much better, but not so well as on the last date. There is some enlargement, of a firm nature, of the textures covering the second cartilage at its junction with the sternum. To continue.

July 20th. Feels better. 24th. Continues to improve. The swelling is much increased in size, being about four inches in circumference, and is circumscribed, hard, and painful. The skin covering it is not adherent, but has an inflammatory blush. Respiratory murmurs of this side are nearly normal, slightly exaggerated on the left side; complains of pain in the swelling. His cough is less troublesome, breath improved, and sputa diminished. Has had two or three bad nights from the pain in the swelling, and his cough has also been very troublesome during the same time. To continue, also to have the tumid parts painted over with Tincture of Iodine, and to take five grains of the Pil. Sap. e Opio. at bed-time.

July 27th. Chest symptoms improved; swelling much diminished. To continue the Iodine which has been applied every morning, also the drops, &c. Having obtained a recommendation, he became an in-patient of some hospital, since which I have lost sight of him.

CASE 12. *Tubercular consolidation of the superior lobe of the right lung, improvement from a week's use of Naphtha.* Eliza Foley, ætat 35, residing at 5, Brewer-street, Golden-square, was admitted under my care on the 1st of May, 1844. Her illness commenced in October, 1843, when she was confined to her bed for some time, with symptoms which she states were those of

“inflammation of the bowels.” Her recovery was protracted, and she then became troubled with cough and difficulty of breathing, and has never been well since. Several of her brothers and sisters have died of consumption. About two months ago she spit for some time small quantities of bright blood mixed with phlegm. She now suffers from an evening paroxysm of fever, with profuse night sweats. Cough very severe in the early morning. Catamenia suppressed.

Physical signs.—Dulness and increased resistance of the antero-superior part of the right side of the chest, increased resonance of the voice and heart sounds; respiratory murmurs over dull portions very indistinct.

She was ordered xv m of Naph. Med. three times a-day out of water.

May 8th. Has experienced much relief to her cough and breath from the drops, especially soon after taking them, and passes much better nights. Pain in the right shoulder, which occasionally shoots from the front to the back, has been troublesome. In her general health does not feel better. Becomes so exhausted from waiting with the other patients that she feels herself unable to attend.

CASE 13. *Tubercular consolidation of the superior lobes of both lungs; relief from Naphtha.* Mary Ann Paget, ætat 18, residing at 195, Piccadilly, was admitted under my care on the 22nd of June 1844. She has been ill for three months. Her ailments commenced with cough and pain in the chest, which she thought “a bad cold,” for which she had a blister applied, and took medicine with some relief. Her symptoms, however, continued, and she has gradually become worse and worse nearly up to the present time. The first attack followed over-exertion, by which she was much heated. She thinks that she has felt better during the last day or two than she did a week previously. During Whitsun-week she spit up about “a tea-spoonful” of bright, florid blood, after coughing, and the same has occurred seven or eight times since. Her mother died of consumption, and a brother in his eleventh year.

At present she suffers from a severe and troublesome cough, attended by mucus expectoration and much shortness of breath,

so that she is incapable of any exertion. Her pulse are rapid, full and soft; perspires a good deal from slight excitement or exertion, and has evening fever, with nocturnal perspirations. Sputa thick and opaque; breath and sputa possess a powerful odour of garlic and sulphuretted hydrogen. Catamenia suppressed.

Physical signs.—Upper and anterior part of the right side of the chest considerably flattened, with diminished play during respiration. Dulness with increased resistance over the antero-superior regions of the chest on both sides; bronchial respiration and broncophony on the right side anteriorly, heard immediately beneath the clavicle, and as low as the fourth rib at its junction with the sternum; on the left side the respiratory murmurs are harsh and loud, and the expiratory prolonged; voice and heart sounds unduly resonant over the dull portions on both sides. The sounds on percussion and the murmurs are normal posteriorly. Naphthæ Med. xv m̄ ter. die.

May 29th. Feels better; cough and expectoration diminished, breath less short and difficult; pain in the shoulders (from which she previously suffered) has entirely disappeared. Physical signs essentially as before. Percussion over the affected parts produces irritation and cough. To continue.

The patient, unwilling to forego the benefits of the naphtha treatment, placed herself under the private care of Dr. Hastings, during the author's temporary absence from town.

Remarks. In the foregoing six cases the physical signs were essentially similar to those which were present in the seven preceding ones—only more advanced, and extensively disseminated. All the patients inherited a tendency to consumption; in the case of Donovan both parents, besides near relations, had died of phthisis; Cooper had lost her father and sister from this disease; Bellilo's mother was consumptive; Wilson had lost his father and near relatives from phthisis; Foley, several near relations; and Paget her mother and brother. Phthisical symptoms should always be regarded with apprehension in those having an hereditary tendency, and physical signs, which might be regarded as far from conclusive in some cases, are of much more weight when one or both parents have already died from consumption.

In the case of Donovan it was stated that her father died of consumption first, and that her mother, who had previously been in the enjoyment of excellent health, became ill, and died of phthisis, after a long and painful attendance on her father. Donovan herself became ill after the attendance on her mother. It is a question of vast practical importance whether phthisis be infectious? Whether, in fact, a previously healthy person, without any constitutional tendency to the disease, can, by prolonged and close attendance on those suffering from phthisis—sleeping constantly as well as living in the vitiated atmosphere of the sick-room, and respiring the air which has previously been breathed by the patient—whether, under these circumstances, combined with grief, fatigue, anxiety, and deficient sleep, &c., the constitutional taint, necessary for the deposition of tubercle, can be produced, and genuine phthisis excited?

A connexion of my own, none of whose relatives were either consumptive or had died of phthisis, and who had himself never shown any tendency to the disease, became affected, and ultimately died from it, after a very close attendance on a friend who fell a victim to consumption.

It is a curious fact also that those who have rendered themselves eminent by their close attention to, and successful investigation of the diseases of the lungs, have themselves often ultimately fallen victims to consumption—for example, Laennec, Fournet, &c. It is true a predisposition may have existed in some or all such cases, however little tendency there may have been manifested previously; but such facts should suggest caution—especially in those who possess an hereditary predisposition to the disease, to avoid a too close and too constant attention on those dying of phthisis. That phthisis may be, and constantly is excited, in those predisposed, by close attendance on near and dear relations will be proved by the experience of all those who have seen much of the dreadful ravages of consumption.

Hæmoptysis was a prominent symptom in every case, and was renewed from every aggravation of the symptoms. Pain in the shoulder or shoulders also was a painful feature in all, with the exception of Bellilo. Moreover the catamenia were sup-

pressed in all the women, being restored in those who benefitted considerably from the naphtha.

Percussion over the diseased parts produced the peculiar sense of irritation and cough, in most of these patients which I have already spoken of, and which, taken with other symptoms, is of some value in diagnosis.

Abscesses and fistula by the side of the rectum occurred in none. Wilson, however, suffered from hæmorrhoidal tumours, and Sly (among the seven cases first described), had abscesses form between the vagina and rectum, with superficial ulceration of the mucus membrane of the vagina, and short fistulous passages in the sphincter. M. Reynaud met with one case of ulceration of the vagina at the Hospital of La Pitié, where softened tuberculous matter escaped into the vagina from the uterus. A tubercle of the size of an ordinary pea was found in the substance of the body of the uterus, underneath the tuberculous stratum. M. Reynaud observes that the fact of ulcerations existing in the most dependent part of the vagina—in that part which was incessantly bathed with tuberculous matter, escaping from the uterus, is in all respects similar to that noticed in respect of ulcerations of the air-passages, and their relation to the discharge from cavities.

Only one suffered from laryngeal complication, which commenced several months after the patient came under my care. The stethoscope in this case (Cooper) discovered nothing more than could be heard at some distance from the patient—viz. an occasional rhoncus in the trachea. The general symptoms were paroxysms of dyspnœa, laryngeal respiration, and difficulty in swallowing.

The case of Donovan is an example of undoubtedly genuine tubercular phthisis, occurring in a powerfully predisposed state of constitution, which had extensively involved the superior lobe of the right lung, and had advanced to a stage which would have speedily terminated in softening, and the formation of caverns. In my own mind I have not the slightest doubt that the patient was rescued from a speedy grave by the beneficial operation of the medicinal naphtha. Some softening and the formation of a

small cavern, did I presume form opposite the inferior angle of the right scapula—being denoted by the large moist crepitation, and very limited gurgling, which occurred in that situation.

The case of Cooper is still doubtful, but will probably terminate fatally. There is evidence, nevertheless, of benefit having been effected by naphtha even in her case. All her symptoms have been invariably alleviated by the remedy, till the occurrence of some laryngeal complication; whilst at the same time the physical signs have on the whole steadily improved. The sudden relapse which has lately occurred has a most unfavourable aspect. Doubtless among the classes of phthisis where medicinal naphtha is generally successful, exceptions will be found who die under the use of the medicine—just as treatment sometimes fails in other diseases of a more curable nature, which will succeed in the majority of cases. Still naphtha may be employed, even in these very unfavourable cases, with almost a certainty of being beneficial, and of prolonging life.

In the child Bellilo the naphtha was very efficacious; although an opportunity was not afforded me of ascertaining the physical signs at a sufficiently advanced period after its employment, to speak positively of the issue of the case.

In Wilson, both the general symptoms and physical signs had undergone a most important change for the better, when he ceased attending. His case also may be quoted as an example of the extraordinary powers of the medicinal naphtha in suspending the advance of tubercular disease in the lungs, and setting up action of a curative nature.

Both Foley and Paget were benefitted during the short time they remained under my care. Neither of them, however, attended sufficiently long for me to form any opinion of their cases. I understand that Paget has relapsed lately under Dr. Hasting's care.

In the cases of Cooper and Wilson the injurious influence of a liquid which closely resembled the medicinal naphtha is well shewn. Previous to its exhibition they had been, both of them, much benefitted by the medicinal naphtha, and were again so on returning to it. They both of them suffered a severe aggravation of their chest symptoms whilst taking the

non-medicinal—the symptoms proving that it was not merely from the omission of a beneficial agent, but from the action of something which proved in their cases injurious or even poisonous. In Cooper it produced pain in the chest, severe cough, great difficulty of breathing, and expectoration of bloody mucus—which symptoms were much relieved by simply omitting the non-medicinal naphtha. Wilson found himself so much worse after each dose of the non-medicinal, that he, of his own accord, omitted to take it. Should not these facts suggest a caution to those who have so loudly and unscrupulously condemned naphtha as an injurious, worthless, and disgusting medicine (without proper investigation), to be quite certain that they have used the remedy which was intended. If they are *not* certain on this point, their evidence appears to me to be of about the same value as his would be who employed the bichloride of mercury instead of calomel, in similar doses, in the treatment of disease, and then in the full tide of eloquence declaimed against it (under the name of calomel) for poisoning his patients. If they are *not* sure of this, their past experience is not worth the ink they have shed in recording it.

CHAPTER V.

VALUE OF NAPHTHA IN ADVANCED PHTHISIS PULMONALIS.

CAVITIES existed in all the cases (10) which I have still to narrate. When phthisis has arrived at this stage it does not admit of cure, except when the tubercular deposition is comparatively limited, and the cavity or cavities small.

CASE 14. *Tubercular consolidation of the superior lobes of both lungs ; empty cavern of small size in the right ; small gurgling cavern in the left. Marked improvement in the general symptoms and physical signs.*—John Kensley, ætat 50, residing at No. 5, Hollon-street, was admitted under my care on the 10th of

January, 1844. At the time of his application he was suffering from severe cough, much shortness of breath, and trifling expectoration. There was much derangement of the health, hectic, and emaciation. His present symptoms had come on gradually during the last two years, with occasional periods of severe illness and improvement. Six months ago he spit up considerable quantities of pure blood, and the hæmoptysis has recurred slightly several times since; at present also his expectoration is streaked with blood.

Physical signs.—Flattening of the antero-superior parts of the right side of the chest, with diminished motion in respiration; considerable dulness and resistance on percussion over the clavicular, sub-clavicular and scapular regions of the right side of the chest; bronchial breathing and broncophony heard over the dull portions anteriorly, laterally, and posteriorly; cavernous respiration and pectoriloquy without any rhoncus, over a space about two inches in circumference anteriorly, in the sub-clavicular region, near the sternum; exaggerated respiration on the left side superiorly.

He was ordered two table-spoonsful, three times a-day, of the following mixture:—℞ Naphthæ Med. ʒij, Træ Hyosciami ʒiij, Aquæ ʒviij M.; also five grains of Compound Squill Pill every night.

January 24th. His chest symptoms are relieved, and his general health is much improved. 31st. Cough lessened, breath much freer; he expectorates easier; hectic and night-sweats much less severe; the emaciation has not increased since he commenced the naphtha. February 7th. The improvement has increased steadily. To increase the quantity of naphtha to twenty drops three times a-day. 17th. Feels, in comparison, nearly well.

From this date he discontinued his attendance till the 27th of March—having occasionally taken the naphtha in the interval. He had considered himself nearly well, but the bad symptoms were now returning.

March 27th. The physical signs remain very similar to what they were on his admission, with the exception of the signs of cavern. The recurrence of bad symptoms seemed to

depend on a fresh crop of tubercles being deposited in the left lung (superior lobe). The flattening of the right antero-superior part of the chest, with diminished motion, continues as before; dulness with increased resistance on percussion over the antero-superior portions of the right side of the chest, also posteriorly; slight dulness of the sternal end of the left clavicle, and over the left sub-clavicular region, especially near the sternum; bronchial respiration and ²broncophony heard over the dull portions on the right side, but the cavernous respiration, and pectoriloquy have entirely disappeared; harsh loud respiratory murmurs on the left, with prolonged expiration; undue resonance of the heart-sounds and voice.

April 1st. Chest symptoms considerably improved; attack of gout in the right wrist and hand. To take xv \mathfrak{m} of Vin. Colch. three times a-day. His symptoms continued to improve steadily on the 10th, and 17th, and on the 8th of May.

May 8th. Dulness on percussion over the superior part of the right side of the chest much diminished, increased over the antero-superior portions of the left side of the chest; respiratory murmurs harsh and loud on the right and left sides over the dull portions; increased resonance of the heart-sounds and voice; an occasional dry crackling sound on the left side.

May 18th. Chest symptoms improved; considerably better in his general health. 25th. Not so well. Great improvement in the physical signs on the right side; increase on the left. Dulness on percussion on the right side superiorly has nearly disappeared; respiratory murmurs less harsh than on previous examination; heart-sounds and voice much less resonant. The dulness on percussion is increased on the left side, with some flattening and diminished motion; bronchial breathing and resonance of voice, occasional large moist crepitation; gurgling over a limited space in the sub-clavicular region, corresponding to the second rib, about an inch from the sternum. He complains of much pain in the left shoulder. To take xx \mathfrak{m} of Naph. Med. with j \mathfrak{m} of Hydro-cyanic acid (Scheele's strength) three times a-day, and to rub the Ung. Antim. Pot. Tart. on the front of the chest.

June 5th. Cough, shortness of breath and pain in the

shoulder much relieved; quantity of sputa diminished; hectic and night sweats less severe; feels much better. Cavernous respiration, and occasional cavernous rhoncus heard over the limited situation where gurgling alone was heard on the previous examination. To continue.

June 12th. Percussion improved, and breathing less bronchial; cavernous rhoncus has disappeared; general symptoms very much improved.

June 22nd. Improvement continues. The cavernous rhoncus and gurgling, with all signs of cavern, have disappeared; dulness less considerable, murmurs harsh, and expiratory murmur prolonged.

August 31st. Since the last date he has been nearly well, and discontinued his attendance, having left off his medicine for nearly two months. Latterly some unfavourable symptoms have again made their appearance. He complains of cough, shortness of breath and hectic, with pain in the hypocondriac region; also of headache and pain in the trachea; the cough has a tracheal sound. The right antero-superior part of the chest is more flattened and duller on percussion than the left, the murmurs of respiration are also again somewhat bronchial with diffused broncophony; increased resonance of the heart sounds. The murmurs on the left side are normal. The stethoscope, applied over the larynx and trachea, discovers no morbid sounds. To continue the naphtha and the Ung. Antim. Pot. Tart.

September 11th. The cough, breath, and hectic, &c., are again much relieved. Physical signs slightly ameliorated. The tarsus and metatarsus of the left foot are attacked by gout. To continue, with the addition of x m of Vin. Sem. Colchici. three times a-day.

CASE 15. *Tubercular consolidation of the superior lobes of both lungs; caverns on both sides; great relief of the general symptoms from Naphtha: death.* Henry Bonnar, ætat 45, residing at 18, Gynn's-place, Lisson-grove, was admitted under my care on the 13th of January, 1844. He has suffered for nearly two years from cough, difficulty of breathing, occasional hæmoptysis, emaciation and hectic. At present he is greatly reduced in strength, extremely emaciated, and suffers from severe evening fever and night sweats.

Physical signs.—Considerable flattening of the upper and anterior part of the chest; very considerable dulness and resistance on percussion of the clavicular, sub-clavicular, and upper portion of the mammary regions of the right and left sides, and of the right scapular; cavernous respiration, pectoriloquy and cavernous rhoncus on the left side anteriorly and laterally, bronchial breathing and broncophony posteriorly; plash on coughing anteriorly; gurgling over a considerable space anteriorly on the left side; exaggerated respiration posteriorly.

He was ordered xv ℥ of Naphth. Med. in water three times a-day, and five grains of the Extract of Hyosciamius at bedtime.

January 27th. Feels much stronger and better to-day, and has acquired an appetite since he commenced the drops, whilst his digestive powers are increased. The cough and difficulty of breathing are much relieved, and the quantity of the sputa diminished, whilst he suffers less from the paroxysm of fever in the evening, but perspires as profusely as ever.

January 31st. He has continued to improve. To increase the quantity of naphtha to xx ℥ ter. die., and to rub a stimulating linament over the front of the chest every evening. (The linament was ordered from his complaining of some pain in the trachea, which especially came on at night).

February 3rd. All his symptoms are much improved and he feels much stronger and better; he no longer suffers from profuse night sweats, nor from tracheal pain. Feb. 7th. The improvement continues, and his cough and breathare much better, and the quantity of expectorated matters diminished. Feb. 17th. As before. To continue.

February 21st. The profuse night sweats have recurred, in other respects the great improvement in all his symptoms continues. On the right side cavernous respiration and pectoriloquy supply the place of the gurgling previously heard; the gurgling continues on the left, but the cavern appears more reverberant and empty.

March 23rd. Improvement continues. Some of the non-medicinal naphtha, very nearly resembling the medicinal, was given him to-day.

March 27th. Has been extremely ill ever since he commenced the last supply of drops. His cough and difficulty of breathing are as bad as ever, loss of strength and emaciation have proceeded rapidly, and the profuse sweats have increased. To take ʒss of Naph Med. three times a-day in water, five grains of the pil. Saponis c opio every night, and two table-spoonsful of the following mixture three times a-day R Acid. Sulph. Dil. ʒiss Inf. Gentianæ Comp. ʒviij. M.

March 30th. His symptoms have again improved. April 3rd. Felt very exhausted but comfortable. He died in the course of the day.

CASE 16.—*Tubercular consolidation of the superior lobe of the right lung ; close, firm adhesions of the entire right pleura ; empty cavity of moderate size ; great improvement of the health and chest symptoms from Naphtha : death from disease of the brain.* Thomas Cheston, ætat 16, residing at 6, Fitzroy-place, New-road, was admitted under my care on the 5th of June, 1844. He states that he has been out of health, from a variety of causes, for the last two years, but he has suffered from cough and difficulty of breathing especially during the two last months. He was in the first instance (two years ago) seized with severe, acute pleuritic pain in the right side, and short, dry cough, from which he was ill a long time ; subsequently a swelling formed in the lumbar region, but was dispersed by treatment ; and three months since he began to suffer from his right knee, which is at present diseased, and for which he is under the care of my friend and colleague, Mr. Storks. None of his immediate friends have died of phthisis, but his sister suffers from consumptive symptoms, and is attended by Mr. Whidborne, the Surgeon-accoucher of the Institution.

At present he complains of cough, with trifling expectoration, which is most troublesome at night and in the early morning, much shortness of breath, pain in the right shoulder, occasionally shooting down the arm, and in the left hypocondriac region, which is of a spasmodic nature, and prevents him from drawing a deep breath ; also of occasional severe headache and giddiness generally attended with violent action of the heart. He suffers from

palpitation also, by exercise, and often after eating. Sputa are thick, opaque, and yellowish, and in small quantities. He is pale, feeble, and incapable of exertion, but without much emaciation, and suffers from evening fever, which consists of a chill, followed by heat, and nocturnal perspiration. The pulse are frequent and feeble. There is an irregular, puckered cicatrix (resembling a strumous cicatrix) over the inferior angle of the left scapula.

Physical signs.—Considerable contraction of the left side of the chest generally, and flattening, in particular, of the antero-superior regions, with much diminution of the respiratory play; marked dulness on percussion with increased resistance of the clavicular, sub-clavicular and upper part of mammary regions; right side generally duller than left; percussion over the sub-clavicular region, about an inch from the right edge of the sternum, produces pain, sense of irritation and cough; bronchial breathing and broncophony heard generally over the superior regions of the chest; sounds of the heart almost painfully audible; cavernous respiration and pectoriloquy in the sub-clavicular region, over the portion where percussion produces cough; exaggerated respiratory murmurs on the left side anteriorly, and posteriorly; violent action of the heart.

He was directed to take $\text{xiv } \text{m}$ of Naph. Med. in water three times a day.

June 8th. Feels considerably better and stronger; breath and cough much easier; hectic less severe. To continue. 12th. The physical signs remain precisely as on the last examination. His general symptoms are all much improved. 22nd. Improvement continues; dulness on percussion somewhat diminished; other signs as before. To continue.

26th. Does not feel quite so well, and complains of pain in the right shoulder and arm; action of the heart very troublesome, with headache and giddiness; to omit naphtha till next visit, and to take ʒi of Mist. Expect three times a day. 29th. Is again slightly improved—especially his headache and action of the heart, but his breathing is more difficult. To return to the naphtha. He was supplied with the non-medicinal naphtha by

the dispenser. All his symptoms were immediately aggravated by the change. His medicine was changed after a day or two's trial, and the medicinal furnished to him again.

July 17th. Has been taking the medicinal naphtha till last Saturday, and all his symptoms have been much relieved. On the 13th the dispenser again gave him some of the non-medicinal (from the supply of the medicinal having failed) since which time he has been very ill. The drops invariably disagree with him, causing sickness, violent headache, and faintness. To return to the medicinal naphtha.

July 22nd. Chest symptoms much improved, the violent headache continues. To apply *Hirudines vi* to the temples, and to continue the drops with Hydrocyanic Acid and *Liq. Opii. Sed. v m.* 24th. His cough and breath are not now at all troublesome, but the headache and nausea, especially on motion, continue. 27th. The chest symptoms are perfectly quiescent; but he has passed most of the day in a state of imperfect coma, and talks very incoherently. When aroused he complains of his head. The hair to be cut off, and iced water to be applied on cloths, as long as the head feels hot to the touch; to apply a large blister to the back of the neck, and to exhibit a full dose of Compound Jalap Powder immediately. During a temporary absence from town he was attended by Mr. Whidborne, of Queen-square. The delirium increased, and he passed into complete coma, in which state he died on the 2nd of August.

Thomas Cheston was seen by several physicians of deservedly high reputation, and the diagnosis formed by each was identical, or essentially the same, as my own, with one exception. This gentleman attributed all the symptoms to diseased heart, but subsequently admitted that he had examined the patient in a very hurried manner, and had been misled by the violent action of the heart which I have mentioned. As a doubt, however, has been expressed of the accuracy of my diagnosis, I subjoin an account of the post mortem examination of the thorax, made on the morning of the 11th of August (on my return to London), with the assistance of Mr. Whidborne, and his pupil Mr. Bowe.

Post Mortem examination of the thoracic viscera.—Soft parts covering the thorax emaciated, but not much decomposed. On

laying open the cavity the viscera were found forced upwards by considerable flatulent distention of the stomach and bowels—the centre of the diaphragm reaching as high as the level of the fourth rib. The *left* lung was firmly and closely adherent by the pleura pulmonalis to the *pericardium*, also in a few limited spots to the pleura costalis. When the lung was removed from the chest it was found to be perfectly healthy and crepitant throughout its entire structure.

When the pericardium was opened the *heart* was found to be of its *natural size* (certainly not so big as the fist of the subject); the *serous lining* of the pericardium, and investment of the heart, being also, quite *unadherent* and perfectly normal. When the ventricles, auricles, and great vessels were opened, nothing morbid was discovered about the valves, or the muscular structure of the heart, unless indeed the left ventricle were hypertrophied (being nearly four times the thickness of the right).

Right lung.—The right lung was most firmly, closely, and universally adherent by the opposed pleural surfaces—the adhesions being evidently of old date, so that it was removed with much difficulty, and only by careful dissection. The lung removed from the chest was found to be itself diseased only in its superior lobe; this portion of the lung contained a cavity of moderate size, with irregular walls, which were covered with a thin stratum of puro-tubercular matter. The cavern communicated freely with three or four large bronchi, and was empty.

CASE 17. *Tubercular consolidation of the upper parts of both lungs; gurgling cavity of considerable size in the left; great relief to the chest symptoms and general health from Naphtha: death*.—Thomas Brison, ætat 50, was admitted under my care on the 31st of July, 1844. He resided at 9, Richmond-street, Soho. Has been ill, more or less, since October, 1843, with cough, shortness of breath, and expectoration, but has been much worse within the last two months. During this time he has emaciated considerably, and during the last three or four weeks has been unable to retain food in the stomach. He has had a sister die of consumption.

At present he suffers from severe cough, especially at night,

much difficulty and shortness of breathing, pain in both shoulders, and behind the middle third of the sternum. The sputa are thick, opaque, yellowish, and abundant. He suffers from a chill towards evening and sometimes in the middle of the day, followed by heat and perspiration, especially at night. His pulse are feeble and rapid, and he is greatly emaciated. He was directed by Mr. Whidborne (being myself out of town at the time) Mist. Expect. ʒj ter die, and to rub in the Ung. Ant. Pot. Tart. over the front of the chest.

August 10th. I saw him for the first time, and found his symptoms to be those already described.

Physical signs.—The antero-superior regions of both sides of the chest are much flattened, with comparatively little motion during respiration; marked dulness and resistance on percussion of both sides anteriorly and superiorly, especially of the left, and of the scapular region of the right side; percussion over the left sub-clavicular region produced cough and irritation; bronchial breathing with broncophony existed over the axillary region on the right side and the sub-clavicular adjoining it; absence of respiratory murmurs over the right scapular region, with bronchial resonance of the voice and increased resonance of the heart-sounds; gurgling over the sub-clavicular, upper part of mammary, and axillary regions; exaggerated respiration over the left scapula.

I directed for him two table-spoonsful three times a-day of the following mixture, ℞ Naph. Med. ʒij. Acid. Hydro-cyan (Scheele's strength) viij ℥, Pot. Nit. ʒss, Aquæ ʒviij M. To continue the ointment.

August 14th. The ointment (owing to the patient's using it too zealously) has acted very powerfully on the integuments of the thorax, producing several sloughs and much inflammation and pain. In other respects he feels much better and stronger. His breath is relieved, and his cough, as well as the quantity of sputa, diminished; hectic less troublesome. To continue the mixture, to omit the ointment, and to apply a bread and water poultice to those parts of the chest which have been acted on by it.

August 17th. The condition of the eruption from the ointment is better, and his cough somewhat easier. Auscultatory phenomena as before. To continue.

August 21st. Feels both better and stronger; breath as before, cough easier, quantity of sputa diminished. Sloughs are separating well, and the chest is much better. Physical signs nearly as before—the right side not sounding quite as dull on percussion as on the last examination.

From this date he became worse, was confined to his bed, and died on the 8th of September.

CASE 18. *Tubercular consolidation of the upper part of the right lung; gurgling cavity of considerable size; relief from Naphtha.* Mary Parnicott, ætat 32, residing at 7, Marylebone-court, was admitted under my care on the 20th of April, 1844. She suckles an infant who is nine months old, and shortly after the birth of the child she suffered from milk abscesses and swelled ancles. About three months ago she first began to have cough and nocturnal fever. Her father is subject to cough.

At present she suffers from severe cough, which is worse at night, evening chill followed by heat and nocturnal sweating, difficulty of breathing, pain in the right shoulder, especially in the scapula, and expectoration. There is considerable emaciation present, and great debility and sense of fatigue.

Physical signs. Marked dulness and resistance on percussion over the whole of the upper part of the right side of the chest; cavernous respiration, pectoriloquy, and cavernous rhoncus in the axillary and scapular regions of the right side; bronchial respiration and resonance of the voice in front; heart sounds unduly resonant.

She was directed to take xv ℥ of Naphthæ Med. in water three times a-day, and to apply a blister to the front of the chest.

April 23rd. Remains very nearly in the same state. May 1st. Rather improved. To continue, and to take five grains of the Pil. Conii. Comp. every night. May 8th. Her breath and cough are relieved and she feels better, but passes very bad nights; always feels much relieved immediately after taking the drops. They occasion warmth of stomach, freedom of breathing, and relief from cough.

May 15th. Improvement continues, but has very bad nights. She was directed to continue, and take five grains of the Pil.

Sapon. c Opio. every night. Feels very exhausted from attendance. The patient continued her medicine for some time, since which I have lost sight of her.

CASE 19. *Tubercular consolidation of the upper part of the right lung ; gurgling cavity of considerable size.* Mary Ann Stainsby, ætat 36, residing at 103, Cromer-street, was admitted under my care on the 23rd of April, 1844. She has been ill about six months with cough and fever. She is much emaciated, and has an attack of chilliness about the middle of the day and towards evening, followed by heat but not perspiration ; and suffers from cough, difficulty of breathing and expectoration. Her pulse are habitually weak and quick, and she is incapable of any exertion from weakness and breathlessness.

Physical signs. Flattening with diminished motion of the antero-superior parts of the right side of the chest ; dulness and increased resistance on percussion of the superior part of the right side of the chest ; cavernous respiration, gurgling, pectoriloquy, and splash on cough in the sub-clavicular and axillary regions ; exaggerated respiration on the left side ; heart sounds unduly resonant over the dull portions. Heart sounds healthy.

She was directed to take xv m of Naph. Med. three times a-day in water, and to apply a blister to the thorax.

She spit blood in the commencement of her illness. She did not re-apply, and I am therefore unacquainted with the effects of the medicine and the progress of the disease.

CASE 20. *Tubercular consolidation of the upper part of both lungs ; extensive cavities on both sides ; considerable relief from Naphtha.* Jane Davis, ætat 24, residing at 10, Cambridge-street, Golden-square, was admitted under my care on the 1st of May, 1844. All her immediate relatives are healthy, with the exception of her father, who is "asthmatic." She has been ill two years, her ailments having commenced after the birth of a dead child. A discharge of blood from the uterus succeeded her confinement, and did not finally leave her for a twelvemonth. She has also spit up pure blood in quantity more than once.

At present she suffers from severe cough, considerable dyspnoea, and profuse expectoration. She is considerably emaciated, and is in an advanced stage of hectic, suffering from very profuse

perspirations and constant diarrhœa. She is exceedingly feeble and exhausted, and has latterly lost her appetite for food.

Physical signs.—The upper parts of both sides of the chest are much flattened, and with little motion during respiration; marked dulness and resistance on percussion; gurgling, pectoriloquy, cavernous respiration and plash from cough heard over the whole sub-clavicular, axillary, and scapular regions of the right side; gurgling, cavernous respiration, and pectoriloquy over the sub-clavicular region of the left side; cavernous respiration and pectoriloquy in the axillary and scapular of left side.

She was directed two table-spoonsful of the following mixture three times a-day—℞ Naphthæ Med ʒij, Liq. Opii. Sed. ʒjss, Aquæ ʒviij M.

May 9th. Feels better; the diarrhœa is much diminished, breath relieved, cough as before, expectoration profuse. She has slept better at night since she commenced her medicine. Has had several attacks of an acute pain in the left mamma and side, which interferes with respiration during its continuance. This pain comes on at irregular intervals, and lasts for an hour and longer. She invariably feels much relieved soon after taking the medicine. To increase the naphtha to xvi ℥ three times a-day.

May 16th. Continues as before. The neuralgic pain in her side is very troublesome. Physical signs remain as on the last examination.

To continue, and to apply a mustard poultice to the left side; the naphtha to be increased to xx ℥ three times a-day.

May 22nd. She is free from pain in the side, but complains of pain in the left foot and ancle, with some œdema of the parts. Perspirations are less severe. To continue, and to rub in the Lin. Terebinth over the front of the chest. 30th. Spits less than before, and has felt much better till two days since, when she sat for some time in a current of air from the door. Auscultatory phenomena remain as before. To continue. She died on the 4th of June.

CASE 21. *Tubercular consolidation of the upper part of the left lung; large cavern; great relief from Naphtha: death.* Margaret

Phillips, ætat 38, residing at 1, Marlborough-row, Cross-street, was admitted under my care on the 18th of May, 1844. She has been more or less unwell with pulmonary attacks for three years. Her present illness commenced (she has been worse) about three months since, and she has several times lately spit up small quantities of blood. None of her relatives have died of consumption.

At present she suffers from severe cough, which is always most troublesome at night, and often terminates in vomiting, dyspnœa and expectoration. The sputa consist of a muco-purulent matter, and amount to about a pint in the twenty-four hours. She suffers from severe hectic, rapid pulse, evening chill followed by heat but not perspiration. There is but little appetite for food. She is considerably emaciated, but does not suffer from any pain, except in one spot beneath the right mamma. Catamenia regular; profuse leucorrhœa.

Physical signs.—Considerable flattening of the upper and anterior part of the left side of the chest, with considerably diminished motions; marked dulness and resistance on percussion; gurgling with plash on cough over the whole sub-clavicular region; puerile respiration on the right side.

She was directed to take two table-spoonsful three times a-day of the following mixture—℞ Naph. Med. ʒij, Acid Hydrocyan (Scheele's strength), viij ℥, Aquæ ʒviiij ℥. ; five grains of Pil. Sapon. c Opio. every night; a blister to the chest.

May 22nd. Feels much better; she has suffered much less from cough and difficulty of breathing since she commenced the medicine. A few minutes after taking it she invariably experiences much relief, and has recourse to it on getting out of bed in the morning, whereby she is enabled to dress in comfort. She has also had several hours of refreshing sleep at night, which she had not had for weeks previously. She continued her medicine for some time, and then having obtained a recommendation for an hospital I lost sight of her. Her friends inform me that she died in August.

CASE 22. *Tubercular consolidation of the superior part of the right lung; large gurgling cavern; relief of the symptoms from Naphtha: death.* Eliza Wright, ætat 41, residing at 62, New Compton-

street, was admitted under my care on the 10th of April, 1844. She has been ill since the commencement of January, 1843, at which time she was pregnant. She was seized, she states, suddenly with violent cough, difficulty of breathing, and much swelling of the abdomen; and that these symptoms were much relieved by medical treatment in a few hours. She has been ill with cough, shortness of breath, and expectoration ever since. About seven months ago she spit blood two or three times in small quantities, and the sputa were streaked with blood for two or three days subsequently. Her sister died of phthisis.

At present she suffers from troublesome cough, and difficulty of breathing, which is worse at night—also profuse expectoration. She is much emaciated, is very weak, and incapable of exertion. The pulse are rapid and feeble, and she has evening chill, followed by heat and nocturnal sweats.

Physical signs.—Flattening with diminished motion of the antero-superior parts of the right side of the chest; considerable dulness of the superior regions of the right side of the chest with increased resistance; gurgling over the whole sub-clavicular region, also the axillary, and scapular; mucus rhoncus, with some sibilant and sonorous rhonci over the infra-scapular region. On the left side of the chest there is puerile respiration with some sibilant and sonorous rhonci.

She was ordered five grains of Compound Squill Pill three times a day, with two table-spoonsful of Mist. Tonic. (Inf. Gent. Comp. with an alkali). 20th. Pil. Conii Comp. v grs. every night; a blister to the front of the chest.

May 11th. Quinæ Desulph. j grn. twice a day.

May 22nd. Bronchial complications relieved; physical signs (with this exception) as before. To take xv m of Naph. Med. in water three times a day. All her symptoms are much relieved; she feels both better and stronger; breath and cough easier; quantity of sputa diminished. Physical signs remain as before.

June 1st. She has improved steadily. 6th. Hectic relieved, chest symptoms less severe. Physical signs nearly as before, the cavern evidently less full of fluid. To continue.

June 13th. Her general symptoms continue much relieved,

but she feels very exhausted, and perspires a good deal. Died on the 19th.

CASE 23. *Tubercular consolidation of upper part of the right lung; cavern; laryngeal disease; (probable) death.* Susanna Jones, ætat 45, residing at 3, Somers-street, Paddington, was admitted under my care on the 20th of January, 1844. She suffers from severe cough, attended by spasm of the larynx, with expectoration occasionally streaked with blood. Her voice is in a whisper, and she has occasional attacks of severe spasmodic breathing. There is great constitutional depression and hectic, feeble, rapid pulse, and occasional profuse night-sweats. She complains of pain in the larynx, and upper part of the chest.

Physical signs.—Considerable flattening of the antero-superior part of the right side of the chest, with diminished motion; considerable dulness on percussion, and increased sense of resistance; cavernous respiration and pectoriloquy (the whispering voice of the patient, passing with a reverberating metallic clearness along the stethoscope) heard in the sub-clavicular region of the right side, over a space of about three inches in circumference.

History.—In May, 1843, she was attacked with profuse menorrhagia, which lasted nine weeks, and on its subsidence she began to suffer from cough, attended by hæmoptysis. For seven days she brought up in gushes, during coughing, quantities of pure blood varying from “half a pint to a pint,” and has had occasional attacks since. The laryngeal disease set in after the subsidence of the hæmoptysis.

She was directed to take two table-spoonsful of the following mixture three times a day:—℞ Naph. Med. ʒij, Vin Ipecac lxxx ℥ Liq. Opii. Sed. ʒss, Liq. Potassæ ʒss, Mist. Acaciæ ʒi, Aquæ ʒvij M; to apply the Emp. Canth. to the front of the chest.

February 17th. All her symptoms much improved; to increase the quantity of naphtha in the mixture to ʒiij. March 2nd. Improvement continues; larynx troublesome, with tenderness on manipulation, and much difficulty in breathing.

March 9th. Continues the same. Physical signs without alteration.

March 30th. Not nearly so well; perspiration very profuse;

much depression. She attributes the increase of her symptoms to the omission of her mixture for nearly a week. Her husband informed me that she had a slight epileptic fit in the night of the 29th.

She did not re-apply, but there is little doubt that her case terminated fatally.

Remarks.—I exhibited naphtha in these ten cases with little hope of effecting any permanent good in the majority. I feel persuaded, however, that if the tubercular deposition be limited, and the predisposition to a phthisical death not very powerful, a small cavern will not deprive the patient of all chance of recovery. Those forms of chronic consumption, where limited crops of tubercles form, become softened, and are expelled before a fresh crop are again deposited, often extend over a course of years before they terminate fatally. In such cases naphtha will prove a most valuable remedy not only in relieving and curing the disease actually present, but will also check the formation of fresh tubercles, and allow the operation of appropriate measures to improve the constitution, and overcome the tendency to the disease, provided the patient give the remedy a fair chance, and assist the practitioner by every means in his power.

The case of John Kensley is a remarkable illustration of these assertions, and although his disease is not cured, still I believe that it would have been in one who was willing and able to continue the medicine and consider himself an invalid. From the commencement of the naphtha treatment, John Kensley has not scrupled to omit the medicine altogether as soon as he felt himself nearly well, and has continued throughout to expose himself to the vicissitudes of weather and fatigue—having, as he states, a family dependant on him for support, which compels him to act so injudiciously.

Very probably the empty cavity, which existed when he first presented himself as a patient, was naturally tending to a cure, provided that his constitutional powers could have proved sufficient to have accomplished it. It undoubtedly cicatrized under the use of naphtha, as the physical signs of its presence were completely removed, in conjunction with a corresponding improvement in the general symptoms. The deposition of a fresh but limited

crop of tubercles on the left side had obviously commenced during the time he so foolishly abstained from attending in the early treatment of his case (from February to the end of March) and was the cause of a renewal of all his bad symptoms. This disease of the left side seems to have increased with a corresponding diminution of that on the right. Some few tubercles softened, and a small gurgling cavity was formed, but became empty and healed; the signs of the tubercular consolidation being also considerably lessened.

In the history of his case it will be seen that he again omitted the naphtha before it was either desirable or even rational, and that the evidences of tubercular disease again made their appearance on the right side, but were again ameliorated by the remedy. Some tracheal symptoms also made their appearance with the last relapse. The occurrence of gout throughout the course of the disease is also worthy of note.

It would not surprise me if the man ultimately fell a victim to his own folly and negligence.

The case of Thomas Cheston (case 16) is an example of tubercular phthisis, of limited extent, following an attack of acute pleurisy, which resulted in contraction of the side. The cavern was empty when I first saw him, and, as I believe that the predisposition was not powerful, there is no reason why it should not have terminated in recovery, had he not died from another disease; indeed the benefit which his chest symptoms received lead to the probability that such would have been, under more favourable circumstances, the final issue of the case.

Although there was not the slightest probability of naphtha effecting any permanent good in the other cases of extensive and advanced disease I have narrated, it will be seen that it alleviated the symptoms with more certainty and speed than any other medicine, especially the difficulty of breathing. In some of the cases it is true that other medicines were combined with it, and part of the benefit might (and perhaps justly) be attributed to them, and to the counter-irritation used at the same time. I have no doubt of the value of counter-irritation, of hydro-cyanic acid, or of opium, but still they do not give the same kind and amount of relief as the naphtha effects.

Enough proof, also, will be found in the cases narrated of the power of naphtha to occasion the same relief when employed alone. In the case of Bonnar, (the father of the Bonnar whose case was narrated amongst the first seven cases), the drops were given alone, with five grains of extract of hyosciamus, at night; in Parnicott alone, and she stated that she always felt much relieved after taking them, and that they occasioned warmth of stomach, expulsion of flatus, freedom of breathing, and relief from cough; and in Wright simply dissolved in water.

In the cases of Bonnar and Cheston, the injurious effects of the non-medicinal naphtha is again shown. It produced a return of the unfavourable chest symptoms in Bonnar, and of the severe hectic. In Cheston the non-medicinal was given him on two occasions; on the first trial all his symptoms were immediately aggravated by the change, and relieved by a return to the medicinal; on the second occasion he was also very ill from the change. He stated that they invariably disagreed with him, and caused sickness, violent headache, and faintness—although some of these symptoms may have depended on an increase of cerebral disease. His chest symptoms were much relieved by a return to the proper remedy, but his cerebral symptoms continued.

The case of Stainsby is introduced merely as a proof that I am desirous of giving an account of every case of which I have taken notes, and not only of stating every fact correctly, but also of keeping back nothing.

Case 23 (Susanna Jones) is an example of severe laryngeal complication with phthisis. Naphtha, although it relieved the chest symptoms, exerted no beneficial influence on the laryngeal disease. Supposing such a case to occur, in which auscultation proved that the phthisical state of the lung might be cured, and was already benefitted by the treatment, would it not be allowable for the surgeon to perform the operation of tracheotomy, in aid of the curative influence of medicinal measures?

In speaking of surgical operations in aid of the physician's attempts to direct the efforts of nature into a proper and healthy channel, I may remark that the operation recently proposed, of making a free external communication through the wall of the chest, with a phthisical cavity of large size, replete with morbid

secretions, is (if it could be effected safely) likely to render the case more curable, provided the extent of disease present, and the pre-disposition of the patient allow the smallest shadow of hope to remain.

CHAPTER VI.

STATISTICAL REMARKS ON THE CASES NARRATED.

THE following *tables* will show the three and twenty cases, I have given at length, in a condensed and readily accessible manner. I have introduced the cases numbered as they are entered in my note book, and not classed as they have been in the preceding pages ; also the age, sex, leading general symptoms, physical signs, parts of the chest affected, the remedies employed in the treatment, and the results, &c.

These tables admit of ready analysis, and I will proceed to shew the conclusions which may legitimately be arrived at by such a consideration of their contents. We shall then, with the facts before us, be enabled to answer the questions proposed in the commencement of the Essay, and which I also proposed to my own mind before commencing the treatment of phthisis by naphtha.

NO.	NAME.	AGE.	SEX.	PHYSICAL SIGNS.
1	John Kensley	50	Male	Flattening of the upper and anterior part of the right side of the chest. Dimin. respir. play, bronch. respir., and broncoph., with cavernous respir. and pectoriloquy. Dulness on percussion on both sides over sternal ends of clavic. & in sub-clav. regions. Left sub-clav. reg. murmurs harsh, exp., prolong., &c.; dry crackling rhoncus passing into the humid, with gurgling in a limited spot.
2	Henry Bonnar	45	Male	Flattening of ant. sup. parts of both sides of the chest, especially the right, diminished resp. play. Extensive and marked dulness on percussion. Cavernous resp. and pectoriloquy of right side, extensive gurgling, &c. of left.
3	Thomas Hills	18	Male	Some diminution of the ant. post. diameter of the right upper part of chest. Dulness on percussion over sternal end of right clav. and in sub-clav. reg. Murmurs of right side harsh, expir. prolonged. Increased resonance of voice & heart-sounds corresponding to dulness.
4	Susanna Jones	45	Female	Considerable flattening of the ant. sup. part of right side of chest, with diminished motion, cavernous res. and pectoriloquy. Marked dulness on percussion.
5	J. Jones	18	Male	Sounds on percussion duller over clav. and sub-clav. region of right side than left, with harsh, respiratory murmurs of same regions and prolonged expiration. Voice and heart-sounds unduly resonant over dull portions.
6	— Hogan	33	Female	Dulness on percussion of the right infra-clav. region and sternal end of clav. Voice and heart-sounds morbidly resonant. Respiratory murmurs (of same regions) harsh; expiration prolonged.
7	Henry Bonnar	23	Male	Dulness of the right clav. and sub-clav. reg. Increased resonance of voice and heart-sounds. Murmurs somewhat harsh, and exp. prolonged.
8	Louisa Willett	22	Female	Dulness of the clav. and sub-clav. regions of both sides, especially the right. Respiratory murmurs of right side harsh, and expir. prolonged, diffused broncophony, and undue resonance of heart-sounds. Respiratory murmurs weak on left side. Sibilant rhoncus of left scap. region.
9	Rosina Bellilo	7	Female	Dulness and resistance on percussion of the ant. and sup. regions of the right side of the chest, with flattening and diminished motion. Bronchial breathing and broncophony, amounting to Laennec's imperfect pectoriloquy. Puerile resp. on left side ant. sup. Sibilant and sonorous rhonci over scap. and inter scap. reg.
10	M. A. Sly	26	Female	Slight dulness on percussion over the clav. and sub-clav. reg. of right side. Resp. murmurs harsh, expiration prolonged, diffused broncophony. Heart-sounds morbidly resonant.
11	Jane Comber	18	Female	Considerable dulness of both clav. and sub-clav. regions, with diffused broncophony. Murmurs harsh, expiration prolonged. Voice alike on both sides, and heart-sounds.

GENERAL SYMPTOMS.	PARTS AFFECTED.	TREATMENT.	RESULTS.
Cough, expectoration, slight emaciation, hectic hæmoptysis. Gout. Pain in both shoulders.	Both sides of the chest anteriorly and superiorly.	Naphtha with Hyosciamus and squills— Hydro cyanic acid— Counter-irritation. Under treatment eight months.	Marked improvement in both general symptoms & physical signs.
Cough, hæmoptysis, severe hectic and emaciation. Pain in both shoulders.	Both sides of the chest superiorly.	Naptha, Hyosciamus, and opium. Under treatment three months.	Marked relief to the general symptoms. Death.
Cough, hæmoptysis, emaciation and hectic.	Right side ant. and sup.	Naphtha. Under treatment one month.	Cure of the general symptoms & physical signs.
Cough, hæmoptysis, loss of voice, laryngeal spasm, dysphagia, severe hectic and emaciation. Pain in the upper part of the chest & shoulder.	Right side ant. and sup.	Naphtha, Liq. Opii Sed. Liq. Potassæ, Vin Ipecac, Counter-irritation. Under treatment seven weeks.	At first marked relief to general symptoms—Epileptic attack & (probable) Death.
Slight cough and expectoration; much shortness of breath and hectic.	Right side ant. and sup.	Naphtha, Vin. Ipecac, Træ. Camph. Comp. Under treatment three weeks.	Relief & cure of general symptoms & physical signs.
Cough, hæmoptysis, expectoration, dyspnœa, slight anasarca.	Right side ant. and sup.	Naththa, Inf. Gent. Comp. Under treatment three weeks.	Great improvement of gen. symp. & phy. signs (probable) cure.
Slight cough and expect. Hectic, and shortness of breath. Pain in the shoulder.	Right side ant. and sup.	Naphtha, Gent. Counter-irritation. Under treatment 3 mnts	Relief and cure of symptoms & phy. signs.
Cough, shortness of breath, expectoration, hectic. Pain in both shoulders.	Both sides ant. and sup. right especially.	Naphtha, Hydro Cyanic acid, Liq. Opii Sed. Counter-irritation. Under treatment five months.	Relief and cure of gen. chest symptoms & phy. signs.
Cough, hæmoptysis, expectoration, emaciation, hectic.	Right side ant. and sup. posteriorly also.	Naphtha and Counter-irritation. Under treatment seven weeks.	Great relief to gen. symptoms & physical signs.
Cough, hæmoptysis, expectoration and dyspnœa. Hectic, abscesses near vagina. Pain in the shoulder.	Right side ant. and sup.	Naphtha. Under treatment 5 mnts. Great irregularity in taking medicine.	Sympt. much relieved, physical signs improved.
Cough, dyspnœa, expectoration, hæmatemesis. Pain in both shoulders.	Both sides ant.	Naphtha and counter-irritation. Under treatment five months.	Complete relief of symptoms and cure of phys. signs.

NO.	NAME.	AGE.	SEX.	PHYSICAL SIGNS.
12	Mary Parnicott	32	Female	Great dulness of the upper part of the right side of the chest, ant. and post. Gurgling in the axillary and scapular. regions. Bronch. resp. & broncoph. in front. Puerile resp. on left side.
13	M. A. Stainsby	36	Female	Dulness of clav., sub-clav., and scapular region of right side—flattening and diminished mobility, cavernous resp., pectoriloquy, and gurgling—Puerile resp. of left side.
14	Eliza Foley	34	Female	Dulness on percussion of right clav. and sub-clav. regions, increased resonance of voice and heart-sounds. Resp. murmurs indistinct.
15	Jane Davis	24	Female	Upper part of both sides of the chest much flattened, with diminished motion. Dulness and much resistance. Gurgling, with cavernous respiration and pectoriloquy over whole sub-clav. reg. of left side—gurgling on right. Gurgling and plash heard in right axillary and scap. reg. Cav. resp. and pectoril in axillary and scap. of left.
16	Mary Phillips	38	Female	Flattening of left upper and ant. part of chest, with diminished motion—Very dull—Gurgling with plash over whole sub. clav. region. Right side puerile respiration.
17	Eliza Wright	41	Female	Flattening with diminished motion of the ant. sup. reg. of right side of the chest. Dulness. Gurgling over the whole sub-clav. reg. of right side, also in axillary and scap. reg. Mucus rhoncus of infra-scap. reg. with sib. and son. rhoncus. Left side res. exaggerated.
18	Eliz. Cooper	39	Female	Dulness of left side subsequently of right, with diminished motion and flattening (clav. and sub-clav. regions) increased resonance of voice and heart-sounds. Resp. murmurs harsh and loud, exp. prolonged. Rubbing sound for brief period heard beneath the acromial end of clav.
19	Thos. Cheston	16	Male	Dulness of the clav. and sub-clav. reg. of the right side, with much flattening and diminished motions. Cavernous resp. and pectoriloquy—Violent action of heart.
20	Ellen Donovan	26	Female	Right sub-clav. reg. flattened, with dim. motions—very dull—bronchial breath and voice. Heart-sound morbidly clear. Dulness of right scap. region, with large crepitation.
21	Robert Wilson	35	Male	Right clav. and sub. clav. reg. dull, increased resonance of voice and heart-sounds. Murmurs harsh and loud, expir. prolonged. Left exaggerated resp.
22	M. A. Paget	18	Female	Flattening of ant. sup. part of right side of chest with diminished motion—very dull—bronchial resp. and broncoph. Left sub-clav. region very dull—murmurs loud and harsh, expiration prolonged—voice and heart-sounds unduly resonant.
23	Thos. Brison	50	Male	Upper. and ant. reg. of both sides of chest much flattened with dimin. motions. Great dulness. Right side broncoph., and bronch. breathing of axillary reg. and sub-clav. near it. Left; gurgling over nearly the whole sub-clav. region, and puerile resp. posteriorly. Absent on right side posteriorly.

GENERAL SYMPTOMS.	PARTS AFFECTED.	TREATMENT.	RESULTS.
Cough, expectoration. Hectic and dyspnœa. Pain in the shoulder.	Right side sup. ant. and post.	Naphtha, conium, counter-irritation. Under treatment five weeks.	Relief of gen. symptoms.
Cough, hæmoptysis, emaciation, hectic, dyspnœa, expectoration.	Right side ant. and sup.	Naphtha and counter-irritation.	
Cough, hæmoptysis, dyspnœa, and hectic.	Right side ant. and sup.	Naphtha. Under treatment one week.	Improvement.
Cough, hæmoptysis, dyspnœa, great emaciation, advanced hectic—neuralgic pain in the left side.	Both sides superiorly, both ant. and post.	Naphtha, Liq. Opii Sed. Under treatment one month.	Great benefit to the gen. sym. Death.
Cough, expectoration, hæmoptysis, dyspnœa, hectic, much emaciation. Pain beneath mamma.	Left side sup. & ant.	Naphtha, Hydro-cyanic Acid, Opium. Under treatment one week.	Much relief to gen. symp. Death.
Cough, hæmoptysis, dyspnœa, expectoration.	Right side sup. both ant. and post.	Squills, Conium, Naphtha, counter-irritation. Under treatment three months.	Great relief to gen. symp. Death.
Cough, hæmoptysis, dyspnœa, emaciation, expectoration, hectic. Pain in both shoulders.	Both sides ant. and sup.	Naphtha, Pot. Nit Opium. Under treatment four months.	Great relief to gen. symp. & improvement of phy. signs, with occasional relapses.
Cough, dyspnœa, expectoration, palpitation of heart, hectic. Pain in the shoulder, &c.	Right side sup. and ant.	Naphtha, Opium, Hydro-cyan Acid. Under treatment two months.	Relief to chest symptoms. Died from dis. brain.
Cough, hæmoptysis, expectoration, dyspnœa. Pain in both shoulders.	Right side sup., both ant. and post.	Naphtha, Counter-irritation. Under treatment three months.	Great relief to gen. symp. —finally cure of both sym. & phy. signs.
Cough, hæmoptysis, dyspnœa, expectoration, emaciation, hectic. Pain in the shoulder.	Right side sup. and ant.	Naphtha, Counter-irritation. Under treatment six weeks.	Relief of gen. symp. & phy. signs.
Cough, hæmoptysis, dyspnœa, hectic, expectoration; breath smells of sulph. hyd. Pain in both shoulders.	Both sides sup.	Naphtha. Under treatment two weeks.	Relief to gen. symptoms.
Cough, dyspnœa, great emaciation, hectic, vomiting. Pain in both shoulders.	Both sides sup. ant. and post.	Naphtha, Hydro-cyan Acid, Pot. Nit. Counter-irritation. Under treatment six weeks.	Great relief to the general symptoms. Death.

Of these twenty-three patients six were under twenty years of age ; three under twenty-five ; two under thirty ; three under thirty-five ; four under forty ; one under forty-five ; two under fifty ; and two under fifty-five,—that is between fifty and fifty-five. Eight cases occurred in males, and fifteen in females.

All the patients suffered more or less from hectic, with paroxysms of evening fever. Hæmoptysis occurred with greater or less severity in sixteen cases, and hæmatamesis (or hæmoptysis ?) in one. Gout also attacked one patient twice during the course of his disease. Fourteen complained more or less of pleuritic pain in the shoulders whilst under treatment, with or without pain in the side of a spasmodic or neuralgic character, or of pain in some other part of the chest. Two patients complained of pain in the side (of the nature already mentioned), without pain in the shoulders. Cough, shortness of breath, dyspnœa and expectoration, were symptoms common to all—varying in severity in different cases. Violent action of the heart was marked in one case only.

More or less dulness, with resistance on percussion, was present in every case, over the diseased portions, also undue resonance of the heart sounds. The respiratory murmurs were harsh, with prolongation of the expiratory, over some portions of the diseased lung in eleven cases ; faint in three ; absent in one ; cavernous in six ; bronchial in eight ; exaggerated in six, over some healthy part or side. The voice was unduly resonant over a larger or smaller portion of the affected side or sides in eight cases ; bronchial in nine ; whilst pectoriloquy existed in six cases. Plash on cough was very evident in two cases. Dry crepitant rhoncus with inspiration was marked in two cases ; the moist in two ; mucus rhoncus in two ; gurgling in eight ; sibilant rhoncus in three ; and sonorous rhoncus in two cases. Flattening of the chest, with more or less diminished motion in respiration, occurred in fourteen cases. A slight pleuritic friction sound existed only for a short time in one case.

The right lung was affected alone in fourteen cases ; the left in one ; both lungs in eight.

Five patients were treated by naphtha alone ; six by naphtha alone with counter-irritation ; thirteen by naphtha with

Hydro-cyanic Acid, Opium, &c., with or without counter-irritation.

One patient remained eight months under treatment ; three for five months ; one four months ; four for three months ; one for two months ; two for seven weeks ; two for six weeks ; two for one month ; and seven for less than a month.

Of the results of treatment seven patients were cured ; five received marked benefit both to the general symptoms, and in the physical signs ; ten received much relief ; and six died, one of the six, however, from disease of the brain.

CHAPTER VII.

CONCLUSIONS OF THE AUTHOR FROM THESE FACTS.

THE analysis of these twenty-three cases will be an amply sufficient answer to the question—whether this (the medicinal) naphtha could be considered as a valuable remedy in any genuine cases of tubercular phthisis ?

As regards the particular forms and stages of phthisis especially benefitted, it will be seen that chronic forms are most amenable to treatment ; especially where the predisposition to a phthisical death is not very powerful, and where the tubercular deposition is limited in extent. The earlier the stage of the disease at which treatment is commenced, the greater prospect is there of success, and the more speedily do they yield to its influences. Six, out of the seven cases of phthisis in an early stage, which I have narrated, received a complete cure from naphtha, and the seventh has been most remarkably benefitted. There is little doubt that this case would have been completely and permanently cured had she not omitted the remedy every time she got a little better.

Extensive and advanced disease, previous to the softening of the tubercles, and the formation of caverns, are, as a general

rule, curable by naphtha. I have given the particulars of a most remarkable case of this kind (Case 8, Donovan). Several of the other cases were also so much benefitted in their general symptoms, and received such a material alteration in their physical signs, that although some remains of disease could still be detected, they were, to all intents and purposes, cured, or would have been so by a steady continuance of the remedy, and by the most rigid attention to every circumstance preventive of relapse, and calculated to restore and preserve the tone and balance of the general health. In some other cases the patients were advancing favourably, but no chance was afforded of completing a cure by their absenting themselves prematurely.

I have already made some remarks on the action of naphtha in phthisis, which has advanced to the stage of cavern. With the exception of some cases of limited disease, and small cavities, I believe, that in the present state of our knowledge, phthisis, in such an advanced stage, does not admit of cure.

The beneficial action of naphtha is seen in the relief of the breathlessness of the patient, the cough, and expectoration; also in the relief of the hectic, the profuse sweating, diarrhœa, &c. Its action on the physical signs is first manifested in the diminution of the dulness on percussion, diminution of the increased resonance of the heart-sounds and voice; a softening down of bronchial breathing into simple harshness of the respiratory murmurs, with a prolongation of the expiratory; then a gradual diminution of these morbid states, and a steady return to the normal murmurs of health.

As regards the *modus operandi* of naphtha, there is little doubt that it is taken into the circulation, and passes off mainly by the bronchial mucus membrane. This is proved by the fact that the peculiar odour of the medicine is imparted to the breath and sputa, and sometimes to the urine passed shortly after its use. Hence it is brought into immediate contact with the tubercles already deposited, with the air cells and bronchial tubes affected, and circulates through the pulmonary vessels ready to separate fresh portions of tuberculous plasma.

The appreciable effects of naphtha seem to depend mainly on the beneficial influence which it exerts on the local disease

—being secondary to this local action. In some of the cases I have given, the catamenial secretion was restored, and in others profuse perspiration and undue secretions repressed.

Naphtha may be used in every form and stage of consumption, except, perhaps, where deposition of tubercles excite acute inflammation, and where the progress of the symptoms is exceedingly rapid and severe—not, however, as I have already stated, with an equal chance of success in each, but with almost certainty of great relief. The naphtha should be, in some cases, combined with such other plans of treatment and medicines as the peculiarity and special indications of the disease may suggest—especially counter-irritation.

I do not believe that naphtha by itself overcomes the tendency to consumption, but that it is capable of arresting and curing the deposition of tubercle in the lung, and I should therefore recommend all consumptive patients—especially where there was a powerful constitutional predisposition, to continue the medicine for some time after all signs and symptoms of consumption had disappeared, and to return immediately to its use on the reappearance of any threatening symptoms. Inasmuch as naphtha will not ensure the patient against some future attack, it becomes him to act as if his life depended on his own discretion, and to seek to re-establish a permanently healthy vigour in his improved constitution, by every means in his power.

Those patients who omit the naphtha before every trace of the disease, capable of being removed, is removed; who, in fact, consider themselves well, whilst they are only convalescents, and every now and then leave off all medicine and act as if endowed with the vigour and resistance to disease of a thoroughly healthy man, are sure to remain wretched invalids, and to relapse after every such act of folly or madness. Such individuals do not give the remedy a fair chance, and therefore, in estimating the value of naphtha in their cases, it is necessary to make fair allowance for this fact.

I believe that those patients who are wise enough to continue the naphtha for some time after the *complete cure* of their disease, and who will attend carefully to their own health, and are not very powerfully predisposed to a phthisical death, run but

little risk of a return of the affection. Should any be so unfortunate as to relapse under these circumstances, they would be again speedily cured by a return to the remedy.

No one of a properly disposed and balanced mind can refuse to give naphtha a fair and unprejudiced trial, and *attend most strictly* to all those circumstances essential to success, especially the choice of a medicinal remedy. Confinement to the house seems in some cases to be prejudicial. In certain quarters the employment of Naphtha has been regarded merely as a piece of quackery and imposition, and I felt disposed to regard it as such myself before I convinced myself of its real value. No mystery has been made of the matter, and it is but an act of justice to Dr. Hastings to give his treatment an unbiased trial, and to state publicly the results. Even if the whole arose from a mere spirit of quackery (allowing it for the sake of argument) the judicious practitioner will not scruple to receive a valuable hint, merely because it was proposed by Mr. A. or Dr. B.; he will examine carefully into every practical suggestion, no matter the source from whence it springs, and will endeavour from his own experience to separate the good from the bad, the valuable from the refuse, the practical from the theoretical.

The opinions which I have seen expressed in some quarters, appear to me to be identical with those formerly entertained of the value of mercury in syphilis, only vice versâ, viz., that if a disease believed to be syphilitic got well under any other plan of treatment than that of a mercurial one it *was not* syphilis, whilst every similar disease which was cured by mercury *was* syphilis, making mercury, in fact, a test of the disease; so in like manner some would have us believe that remedies act as a test in diseases believed to be phthisical, and that if such a disease got well under naphtha, or any other plan of treatment, it *was not* phthisis, but if the patient progressively got worse and died, the disease *was* phthisis. So much for logical argument!

I may state, in conclusion, that I have used naphtha in several cases of disease of the chest which resembled phthisis in their general symptoms, but differed most essentially in their physical signs. In most of these cases it has proved a highly valuable remedy.

APPENDIX.

ELIZABETH COOPER. On the 26th of September the symptoms remained the same, but the patient more exhausted and feeble. 29th. Has continued to sink rapidly. She is quite free from pain, but so exhausted that she can hardly speak or cough. The expectoration is considerably more abundant, and consists of muco-purulent rounded portions. Cannot sleep much from laryngeal spasm, which comes on at such times; the voice, however, is natural, though in a whisper, but there is much dysphagia. The tongue continues to be covered with aphthæ. The patient manifests much intolerance of light.

She continued to sink, and died on the 3rd of October, at 4 o'clock, A.M.

Post mortem examination at 3 o'clock P.M. October 4th. The body was excessively emaciated.

Left lung.—The pleural surfaces were adherent over the whole of the upper portions of the left lung, by bands of false membrane, which admitted of being broken down by the finger, and at the apex of the superior lobe (that portion which passes up beneath the clavicle) very closely by a thick tubercular layer inseparably connected with the lung itself. When the lung was removed from the chest a complete cap, or hollow cone of tuberculous matter, with some small portions of lung, were left behind from this cause.

The lung itself was a mass of softening and softened tubercles, gradually shaded off inferiorly, the only sound portion being over a small space inferiorly and posteriorly. The superior lobe was especially affected, and, when cut into, showed no sound parts, but a tissue replete with softening, and softened tubercles, which was dripping with pus, but without any decided cavity or cavities. There was much purulent fluid in the lower lobe of the

lung, but many of the tubercles were less softened than in the upper lobe.

Right lung.—The pleural surfaces were adherent in an exactly similar manner here as on the left side, and the removal of the lung left the same hollow cone of tuberculous matter beneath the clavicle. There was a small portion of adematous, but crepitant, and otherwise healthy lung situated superiorly and anteriorly. All other parts of the lung were loaded with softening tubercles, but free from caverns.

Heart.—The heart was of small size, otherwise healthy.

Larynx and Trachea.—The mucuous membrane lining the posterior wall of the trachea, throughout its whole length, was covered with a layer of tuberculous matter, which, on being scraped off, showed a vascular and abraded surface, with three or four superficial ulcers. The epiglottis was vascular, and there was a considerable lump of softened tubercle in the left arytaeno-epiglottic ligament.

LOUISA WILLETT. On the 9th of October Louisa Willett applied at the Blenheim-street Infirmary after her return from Margate. She stated that during the use of baths she had some return of shortness of breath and cough, but that these symptoms were now much better. Her thumb was completely healed, leaving an unsightly cicatrix, and a stiff joint; and she was in the enjoyment of much better health. During her residence in Margate she had become stronger and stouter. Both sides of her chest sounded equally well on percussion; there was no morbid resonance of the voice; and the respiratory murmurs were perfectly normal on both sides.

She complained of a sense of distention in the epigastric region after dinner, attended by shortness of breath, and slight cough. She was directed Mist. Tonic. \mathfrak{z} i ter die.





